A geography of transformation:

The restructuring of the automotive industry

in Hungary and east Germany, 1989-1994

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in the Department of Geography in the University of Durham**

For my dad, GRAHAM SWAIN (1944-1994),
and for my mum and brother.

Abstract

In 1989 the landscape of the global economy was dramatically refashioned. The disintegration of the soviet system in east and central Europe led to a search for an 'institutional fix' for the legacies of the planning regime. That 'fix' involved the region's rapid reintegration with the global economy and raised the prospect of it providing the latest temporary 'spatial fix' for capital and a cure for the ills facing Fordism. A crucial element in that process was foreign direct investment. The automotive industry committed a significant proportion of all foreign direct investment in the region. As a result auto-related investment played an important role in the institutionalisation of market-based relations and in shaping uneven regional development. This thesis investigates these issues through an examination of the transformation of the Hungarian and east German automotive industries between 1989 and 1994.

The thesis, utilising semi-structured interviews with managers, labour representatives and government officials carried out in Hungary and east Germany in 1992 and 1993, investigates the impacts of investment and the restructuring of the industry on the workplace and on industrial and regional development. Six case studies are explored in depth. The case studies illustrate the unevenness and geographical mediation of the transformation of the auto industry and more broadly of socio-economic change in east and cental Europe. The studies also show that east and central Europe provided a 'spatial fix' for western producers accompanied by an 'institutional fix' which resulted in the development of disembedded regional economies.

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Durham, 29th February 1996

Declaration

This thesis is my own work and has not been previously submitted for consideration for any other degree in this or any university. Material from published and unpublished work of others is credited to the author(s) in the text.

Statement of copyright

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List of abbreviations

H refers to Hungary
G refers to East and/or West Germany

ÁU Rt	State Holding Company (H)
ABM	Arbeitsbeschaffungsmaßnahmen (G)
BDA	Confederation of German Employers' Associations (G)
BGL	Betriebgewerkschaftsleitung (G)
BGO	Betriebgewerksorganisation (G)
CEC	Commission of the European Communities
CKD	Completely-knocked-down
CMEA	Council for Mutual Economic Assistance
CRI	Council for Reconciliation of Interests (H)
DFI	Direct Foreign Investment
DGB	German Union Federation (G)
EBRD	European Bank for Reconstruction and Development
ECE	East and Central Europe
ESOP	Employee Stock Ownership Plan (H)
FDGB	Confederation of Free German Trade Unions (G)
GDR	German Democratic Republic (G)
Gesamtmetall	Association of Metal Industry Employers (G)
HAIC	Hungarian Association of International Companies (H)
IGM	IG Metall (G)
IGMO	IG Metall Ost (G)
JIT	Just-In-Time
MBO	Management Buy Out
MDF	Hungarian Democratic Forum (H)
MIER	Ministry of International Economic Relations (H)
MIT	Ministry of Industry and Trade (H)
MOSZ	National Federation of Workers' Councils (H)
MSZP	Hungarian Socialist Party (formerly the Hungarian Communist Party)
MSZOSZ	National Confederation of Hungarian Trade Unions (H)
NEM	New Economic Mechanism (H)
LIGA	Democratic League of Independent Trade Unions (H)
SED	German Socialist Unity Party
SLA	State Liquidation Agency (H)
SPA	State Property Agency (H)
STASI	GDR Secret Police (G)
THA	Treuhandanstalt (G)
TQM	Total Quality Management
VASAS	Hungarian Metal Workers Union (H)
VOSZ	National Association of Entrepreneurs (H)
ZWOT	National Council of Trade Unions (H)

Chapter 1 Introduction: A geography of transformation

1.1 Introduction

In 1989 the landscape of the global economy was dramatically refashioned. The collapse of the soviet system in east and central Europe (ECE) was accompanied by immense enthusiasm for capitalism as people and states stampeded for the market hankering after a 'western' lifestyle. At the same time new markets and new low-cost production locations proximate to the European Union (EU) raised the prospect that ECE could provide the latest '*spatial fix*' for capital and could contribute temporarily to cure the ills of a global economy that had stumbled from one crisis to another since the early 1970s. In the initial period after 1989 the automotive industry was foremost in shaping ECE's reintegration into the global economy. The intensely-competitive automotive market in western Europe arising from over capacity and highly efficient Japanese competitors, resulted in major companies rapidly investing in ECE as they sought solutions to the industry's problems. As a result the opening up of ECE to international flows of capital led to a new round of investment which dramatically refashioned the geography of European automotive production. In this way after 1989 east and central Europe was reintegrated into the global economy.

The soviet system had never been totally isolated from the capitalist world economy and from the late 1960s onwards had become increasingly dependent on global commodity and financial markets as a means of maintaining a system that could not intensify production. Growing dependency on the capitalist system failed to resolve the inherent problems in the crisis-ridden soviet system and moreover tied it

into the unstable global economy and the law of value. Insertion into the global economy, which was increasingly managed according to neo-liberal principles resulting in deflation, the extension of the law of value and the flow of wealth from poor to rich regions, led to a deterioration in ECE's 'terms-of-trade' and high levels of indebtedness (see Clarke *et al.*, 1993, see also Lipietz 1984). These problems accelerated the disintegration of the soviet system in the late 1980s. Following 1989, ECE sought an '*institutional fix*' to the region's crisis which centred on a 'transition to capitalism' and *reintegration* with the global economy. Central to ECE's reintegration into the global economy was direct foreign investment (DFI) and its role in the transformation of production systems. However, as reintegration proceeded it was accompanied by continued crisis in the region as recession and social inequality intensified.

This thesis sheds light on these processes through an examination of the transformation of the automotive industry in Hungary and east Germany. This chapter introduces the thesis by outlining the research topic and detailing the research design and methodology. Having specified the research questions, the second and third sections consider respectively the design of the research project, the focus of the research strategy, and the methodologies employed in conducting it. In doing so the chapter refers in particular to the specific problems involved in researching rapidly transforming countries. The chapter ends by outlining the organisation of the thesis.

1.2 A geography of transformation: the automotive industry in east and central Europe

Since the early 1970s the automotive industry was emblematic in not only reflecting the crisis in the Fordist organisation of production but also in pursuing solutions to that crisis[1]. In particular auto-makers sought to introduce new production techniques, not least in reassessing the 'make' or 'buy' equation, and new forms of labour organisation. Both types of reorganisation were inseparable from the changing geography of production. Reform in east and central Europe (ECE)[2] opened up a new 'spatial fix' (see Harvey 1982) for the industry by widening the range of options open to car makers. The changes in ECE after 1989 were widely interpreted as contributing to the creation of a painful 'transition to capitalism' and the establishment of democratically regulated market economies. However, several years after the disintegration of the soviet system[3] the outcome of complex and often contradictory developments in the region undermined the notion of a simple rapid teleological 'transition' to a capitalist system. Whilst marketisation occurred it did so in combination with the legacies of the soviet system. These in turn depended on the different ways in which the soviet system collapsed in different ECE countries (for example, unification, rapid revolution or evolutionary change). As a result ECE

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1 Automotive industry refers to not only passenger cars but also, where relevant, commercial vehicles.

2 East and central Europe (ECE) refers to: Albania, Bulgaria, former Czechoslovakia (and its successor states), Hungary, former GDR, Poland, Romania, former USSR (and its successor states west of the Urals), and former Yugoslavia (and its successor states). This is not to suggest, however, that the findings reported herein are necessarily representative of the region.

3 The term 'soviet system' is the preferred referent (in contrast to state socialism, actually-existing-socialism, socialism, communism, state capitalism, central-administrative system) for the socio-economic formation that existed in the USSR after 1917 and elsewhere in east and central Europe after the 1945. It is the term used in this thesis because it excludes contestable ideological references, does not reify the state (which was weak) nor central control (which was illusionary) but is historically and geographically specific and therefore refers to a social system that was the output of conflicting strategies rather than the outcome of ideological design.

underwent complex predetermined 'transformations' involving conflicting strategies, which were path dependent and path shaping, and resulted in the generation of new combinations of social relations (see Hausner *et al.*, 1995). Moreover these transformations were highly regionally specific, being territorially embedded and constituted. In consequence changes in ECE were different at national and sub-national scales with the result that there was a complex geography of transformation. Industrial systems were central to post-soviet transformations.

The planned soviet automotive industry reflected the problems that were inherent in the soviet model of industrialisation. The planning system did not provide any incentives for enterprises to intensify production by increasing efficiency nor to innovation in manufacturing processes or products. Production was organised into large highly vertically integrated enterprises but was inefficient and disorganised due to the lack of mechanisms to control and co-ordinate the productive efforts of workers within and between factories and enterprises. As a result the automotive industry, like the system as a whole, was unable to transform itself from an extensive to an intensive mode of accumulation owing to an inability to intensify production (substitute capital for labour).

In the course of the disintegration of the soviet system and the development of markets the region's automotive industry, along with other economic activities, was *transformed.* The transformation of the automotive industry in ECE occurred in two ways: marketisation through commodification and reintegration with the global economy. First, newly-elected post-soviet governments, heavily influenced by

western states and multilateral financial institutions, permitted the capitalist law of value to wash across their territories in the belief that the market would modernise their indigenous automotive industries. This involved the liberalisation of the market (by legalising imports for example), the introduction of market forms of co-ordination, and the privatisation of state owned producers. As a result economic rationality was altered which involved a reassessment of the viability of production based on new market-based criteria, the valorisation of capital, rather than bureaucratic directives. In short production was marketised through *commodification.* Second, governments opened their economies to flows of direct foreign investment (DFI) and established a welcoming stance towards potential investors in the expectation that they would modernise industry, assist in export-led growth and contribute further to marketisation and the development of an internationally competitive capitalist production system[4]. At the same time west European auto-makers, in a phase of significant restructuring, sought new markets and production locations to form a new basis of competition not only between themselves but also with Japanese competitors. Thus the *reintegration* of ECE raised the prospect of ECE providing the latest 'spatial fix' for the global auto industry, particularly for companies already established in western Europe.

The automotive industry was at the forefront of new production strategies in ECE not least through committing considerable amounts of direct foreign investment to the region. By mid-1992 ten major assembly projects had been announced

[4] Throughout the thesis investment by west German companies in former GDR is considered to be 'foreign' prior and subsequent to unification in order to reflect the dynamic of flows of capital even though they were technically within the same state after 1st October 1990.

entailing 1.2 million units of additional automobile assembly capacity (see Swain 1992a, Sadler *et al.*, 1993). In addition, automobile components producers also invested in the region as they followed their major customers into the new market or sought new low cost production locations from which to supply existing markets predominantly in western Europe. As a result automotive investment in ECE formed a significant proportion of total DFI in the region. By the end of 1993 automotive investment in ECE (excluding former GDR) comprised over 10pc of total DFI in the region (Sadler and Swain 1994, 395). In addition some of the largest single investments in the region were made by car companies such as VW and GM Europe.

Automotive DFI therefore played a significant role in the transformation of the industry and more generally in shaping the region's post-soviet transformations. Automotive investment had two types of impacts on host regions and countries. First, by locating production in the region automotive investment contributed to the establishment of capitalist social relations of production. This was achieved not only through the demonstrative role implicit in establishing new production concepts but also by the generation of new business rules which were diffused through those with whom such investment did business with (state authorities and other companies) (see Radice 1993). Second, investment played an important role in shaping uneven regional development. In attempting to attract foreign investment the government policies that were pursued had important implications for uneven regional development. In addition, the location of the projects themselves had an important propulsive impact which played a crucial role in uneven economic development.

This thesis, therefore, examines the transformation of the automotive industry in Hungary and east Germany and in particular the role of automotive DFI in this process. In doing so the research addresses two sets of questions which arise from the conceptual issues which surrounded the crisis of Fordism, the disintegration of the soviet system, and post-soviet transformations in ECE. The first set of questions revolve around how ECE became a 'spatial fix' for the automotive industry. What local conditions made automotive production in ECE attractive to foreign investors? Was investment attracted by the prospect of low labour costs and/or the potential to utilise labour in a flexible way? To what extent did investors seek location in ECE in order to refashion the supply chain? What were the implications of automotive investment in ECE for production and employment in the industry in western Europe? The second set of questions centre on the role of automotive DFI in instituting capitalism in ECE and transforming its auto industry. What impacts did different automotive investments have on the transformation of host regions? Moreover, the fusion of these two sets of issues begs a further question: how did the integration of auto production in ECE into pan-European and global production systems shape paths of regional development in ECE? These questions are addressed through an examination of the transformation of the automobile industry. The transformation is examined from three different angles: (1) through changes in the regulatory and governance environment, (2) strategies pursued by companies, and (3) strategies pursued by employees and their representatives. We now turn to the progression and design of the research project.

1.3 Research design

Stage one: Preliminary investigations

The doctoral project commenced in 1991 with two possible avenues of research owing to the uncertainty and complexity of doing research in east and central Europe at that time. One was to concentrate on the significance of the opening-up of ECE for the European automotive industry as a whole with the object of focus lying in corporate strategies, in other words the macro scale. The second avenue was to pursue detailed micro-scale research into the investments themselves and their impacts on the host region. The decision as to which strategy to follow depended, in part, on how investment in the region developed.

With this in mind preliminary investigations were undertaken into automotive company strategies which indicated that there were two simplified types of investment and production strategy in ECE[5]. The first involved the extension of existing west European production systems by the location of elements of the production filières into ECE. These investments closely resembled traditional 'branch plants' which sought low-cost and pliant labour forces for specific parts of the production process. The second trend involved the establishment of regionally integrated car production systems in ECE. Both types of strategy formed part of the industry's response to competition from highly efficient Japanese producers. Thus investment in ECE contributed to the internationalisation of the west European automotive industry and involved experimental forms of production (particularly connected to supply logistics and the organisation of labour). The two types of investment strategy had a complex

[5] These preliminary findings were reported in Swain (1992a) and Sadler *et al.*, (1993).

and distinctive geography at the international scale. Hungary, for instance, rapidly attracted branch plants which particularly specialised in the production of automotive components. Elsewhere, particularly former GDR, the Czech Republic and Poland, investors sought to maintain or create local car production systems. In the early 1990s investors did not look beyond these countries which gave an indication of the geographical and socio-economic limits of ECE's 'spatial fix'. However, the picture was somewhat more complicated than thus far indicated, at least in some ECE countries, involving a complex combination of different strategies which had varied implications. Thus Suzuki, the only Japanese assembler that had made an investment in ECE at that time, established an assembly plant and set about attempting to build a 'localised' production system. It was thus very different from the 'branch plant' investments. The picture was also complicated in east Germany. VW sought to establish a regionally integrated production plant (utilising concepts adopted from Japanese producers) in the former GDR. In contrast GM Europe's assembly plant in east Germany more closely resembled a 'branch plant' type investment. In addition the speed and development of the investment projects varied across ECE. Hence, Fiat's ambitious plans to build a large assembly plant in the former Soviet Union were subsequently abandoned as the country broke-up. However, even in the more stable countries, such as Poland, investment projects proceeded only slowly.

As the same time as investment strategies established new spatial divisions of labour, newly-elected post-soviet governments began to pursue different paths of transformation. Thus a mode of development based on forced industrialisation was replaced by divergent national and regional development paths which resulted in the

fragmentation of ECE. Particularly significant, was the manner of the disintegration of the soviet system in different countries and the ways governments sought to induce the 'transition to capitalism'. Thus in Poland, where there had been powerful oppositional groups (the Solidarity trade union and the Catholic church) change involved rapid destablizing 'shock therapy'. Change was also rapid in the Czech Republic but the sorts of reforms introduced were very different, reflecting the lack of powerful opposition to the soviet regime. In contrast change in Hungary predated collapse of the soviet system and an evolutionary approach was maintained. However, the most rapid and all-encompassing change occurred in the former GDR in the form of unity with West Germany and accession to the EU.

There were two important outcomes of the preliminary research findings. First, as investment projects were proceeding and production was coming on stream it was decided that a detailed study of investments was feasible. In consequence the option which concentrated on corporate strategies and change at the macro-scale was rejected because a detailed study of particular investments would better indicate the nature of change. Second, owing to marked international differences in the impact of global processes of change involving the disintegration of state planning and the redrawing of the map of European automobile production, it was decided that an international comparison would be the most fertile course of study.

Stage two: International comparison

An international comparison was chosen for a number of reasons. First, it underlined the significance of the national scale in *mediating* broader processes of

change. Not least this included national paths of transformation and national regulatory environments. Second, in seeking to identify points of contrast and comparison it facilitated interrogation of broader processes. However, there were some disadvantages in pursuing an international comparison.

Hungary and the former GDR were selected as two case studies to permit international comparison. The selection of the two study areas was grounded in conceptual issues arising from the preliminary research. By early 1992 large amounts of automotive DFI had been attracted to both countries and production was due to commence soon if it had not already done so. However, the path of transformation of each country was very different, and in some respects represented the extremes within ECE. The conceptual basis for selecting Hungary and east Germany was twofold. First, investment in the two study areas typified the variety of investment strategies that existed in ECE. Thus Hungary attracted branch plants and became integrated into west European production systems whilst the indigenous sector floundered. In contrast in the former GDR investment centred on experimental 'lean' production. In addition, investments in the two countries and the manner in which manufacturing facilities were integrated into the European car production system captured the variety and coexistence of different trends.

The second conceptual basis for the selection of the two case studies centred on their very different paths of transformation. The soviet system in Hungary had been gradually reformed through decentralisation and liberalisation after 1968. As a result over the course of 20 years, rigid central planning was replaced by bureaucratic

controls. In consequence the disintegration of the soviet system represented an acceleration of processes that had been in existence for two decades. As a result post-soviet change remained gradual, evolutionary and relatively negotiated, involving for example a tripartite body including representatives of the state, employers and employees. In contrast the former GDR's path of transformation was highly statist. The rigid central control of the GDR's soviet system which existed right up to its collapse continued after the *Wende* (the word, meaning change, used by the Germans to refer to unification) in the form of rapid change centrally imposed by the west German state.

Stage three: Case studies

Having selected the two study areas, research visits were made, in mid-1992, to both countries in order to identify case studies and other relevant institutions, government bodies and trade unions, and to commence investigations[6][7]. A case study approach was pursued for a number of reasons. First, it permitted the examination of local factors to identify the mediation of place at the sub-national scale. Second, it enabled detailed investigations through which to examine broader processes. Third, it enabled the identification of points of contrast and comparison at the national scale. However, there were some disadvantages in pursuing a case study approach. First, case studies can be interpreted as being 'representative' which may not be the case. Second, there is a tendency to select examples which are in differing ways

6 Investigations of five of the six case studies presented in the thesis commenced in 1992.

7 The preliminary findings of the research visits in 1992 were reported in Swain (1992b, 1993) and Sadler and Swain (1994).

exceptional. Third, there is a danger of extracting examples from their contexts and presenting a misleading account.

The selection of case studies sought to minimise these problems. First, attention was directed to the largest investments and largest enterprises and therefore those most likely to have significant impacts. As a result the choice of assemblers, Suzuki in Hungary and VW in east Germany, was straightforward[8]. Second, investigations were directed at different sorts of firms to capture the variety of change. Hence, component producers were investigated in addition to assemblers, greenfield plants in addition to acquisitions, and state owned enterprises in addition to privatised firms. Third, a database of foreign automotive investments was compiled which served to contextualise the case studies. Fourth, the six case studies featured in the thesis were, in part, selected because of their links with each other. As a result, particularly in east Germany, the case studies collectively and individually tell a story.

1.4 Research methodology

The research project sought to combine intensive semi-structured interviews and an extensive survey. The intensive element of the research involved four research visits, two in 1992 and two in 1993. The extensive part of the research involved a postal survey of automotive component producers in Hungary, east Germany, the Czech and Slovak Republics and Poland. The survey arose from the findings of the first research visits and was conducted in mid-1993. However, the results of the

[8] In Hungary Suzuki was the only genuine automobile manufacturer as GM Hungary assembled kits imported from west Germany. In eastern Germany, Opel's production facility would have proved an interesting case study given the stress on innovative forms of production. However, access to the facility was not forthcoming in part owing to its later opening.

postal survey are not reported in this thesis[9]. In addition, information on automotive investment, in order to contextualise the case studies, was compiled from secondary sources[10].

In the course of four trips to the study areas, in excess of 100 interviews were conducted. In total around 65 interviews were conducted at 23 companies, two unions, seven national state bodies and four local state bodies visited in Hungary in 1992 and/or 1993. In (east) Germany 39 interviews were conducted at eight companies, the IG Metall trade union, the Treuhandanstalt, and three local state institutions visited at least once in either 1992 and/or 1993[11]. In addition to these formal interviews relevant academics in Hungary and east Germany were also consulted and secondary sources connected to the institutions visited collected.

Although the interviews did not follow a standard procedure some general remarks are possible. The interviews were open-ended, semi-structured in content and ranged in length from half an hour to a whole day. In some instances there were repeat interviews with the same individuals or others in the same organisation. Whilst

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9 The survey illustrated the problems of carrying out such a methodology in societies undergoing rapid transformation. Thus there were 61 completed replies giving the survey a response rate of only around 10pc. The calculation of an exact response rate is prevented owing to the inadequacies of the population and the chaotic situation at the time in many of the enterprises surveyed. The low response rate is despite a considerable level of official support for the survey from relevant authorities in the countries.

10 These included corporate press releases, government publications, newspapers, and specialist industry media.

11 In the course of organising fieldwork in east Germany in 1993, to return to further investigate the case studies begun in 1992, it became clear that another UK based researcher sought access to similar organisations at the same time. To facilitate access, approaches to organisations were co-ordinated which resulted in some tandem interviews and the exchange of other interview transcripts. Six tandem interviews - three at VW Sachsen (where six were conducted in 1992), one at GKN (where one was conducted in 1992) and two at local IGM offices - are particularly drawn upon in this thesis. Their interpretation remains my own. In addition, two transcripts were generously made available to me and are acknowledged at the appropriate points in the thesis.

the thesis is not a longitudinal study where institutions were visited in 1992 and 1993 it proved more possible to investigate change over time. The majority of interviews involved more than one interviewee. Early interviews were taped but the presence of a tape recorder was counter productive to the interview strategy, and thereafter consultations were recorded in written note form.

A wide variety of informants, who played varied roles, were consulted in a broad range of situations. There were three types of informant: managers, government officials and trade union/employee representatives. The majority of corporate interviews were conducted with managers responsible for strategic development. This was often the plant's general director. In larger companies access was sought with managers responsible for logistics and personnel issues. The structure of the interviews depended on the nature of the enterprise concerned. Interviews with foreign investors who built new plants, for example, addressed the reasons behind the investment and location decision, the sorts of logistics systems employed, and systems of labour organisation. In contrast interviews with existing enterprises addressed the operation of the enterprise under the soviet system, the impact of the disintegration of the system on the enterprise and the subsequent management strategies employed to restructure the company in terms of production and privatisation. Where possible the opportunity to observe production was sought.

Interviews with government officials were more specialist depending on the responsibility of the officials concerned but centred on the changing nature and role of the state in general and policies connected to industrial change, foreign investment,

and privatisation in particular. Interviews with trade union and works council representatives addressed the industrial relations system, trade union strategies and workers' resistance to and/or acquiescence in management strategies. In addition to interviews there were additional sources and forms of data. These included press reports, press releases, specialist industrial sources (such as privatisation tenders), published and unpublished official documents, and academics and experts (who often doubled up as government or corporate consultants).

In the course of the research a number of significant methodological issues were identified which were specific to researching rapidly transforming societies. The legacy of the soviet system and its disintegration raised four specific issues. First, the isolation of ECE in general and academia in particular meant this author's research was not always readily understood. Indeed the fondness with which the market was held at the time, particularly in government circles, resulted in doubts about the need for the research: after all had not capitalism "solved" east and central Europe's problems!? There was thus a tendency for informants uncritically to reproduce the dominant cultural views of the time. Second, a lack of familiarity with the market and its language led to some misunderstanding[12]. As a result there was often a hybrid of capitalist rhetoric and soviet-style action.

Third, the rapid disintegration of the soviet system resulted in confused and blurred roles. This had some advantages and some disadvantages. Not least, the rapidly changing situation fostered a 'pioneer' spirit which facilitated openness. As a

[12] Translation accentuated this problem.

result in some instances informants were more forthcoming than would generally be expected in more 'stable' situations. However, the major disadvantage was the difficulty of identifying informant roles and interests. To indicate the scope of uncertainty it was sometimes not clear whether managers assumed the role of owners, or government officials the role of managers or whether trade union officials assumed the role of workers or were co-managers. As a result the boundaries between politics, commerce and research were blurred. Fourth, dealing with government bodies was difficult. The almost continuous reorganisation of government hindered the identification of responsible individuals. This was connected with the fifth issue. The soviet system simultaneously created highly specific lines of responsibility and accountability resulting in departmentalisation and fragmentary knowledge. Individuals were adept at circumventing responsibility.

Researching rapidly transforming societies demanded a multiplicity and combination of different data collection strategies and forms of data. One example was the way interviews were often not confined merely to informant's current role. Some managers, for example, had been production workers, some plant directors (and plant owners) had formerly been central planners, some interviewees had formerly worked at other automotive enterprises and so on. As a result information on issues was sought from managers, employee representatives, former employees, competitors, consultants, experts and regulators. This permitted verification of evidence. In consequence although the data was in some ways not strictly comparable, the variety of sources allowed the identification of informant's roles and a sensitivity to situatedness. The combination of fragmentary evidence developed a view of events

from several angles, permitting a rounded assessment. The eclectic combination of sources permitted a greater and deeper understanding due to the triangulation of methods.

1.5 Organisation of the thesis

The thesis is divided into two parts: part one comprises theorised interpretations of change in the European automotive industry and in east and central Europe, and part two examines in detail the transformation of the automotive industry in Hungary and east Germany. Chapter two examines the crisis the west European automotive industry faced from the early 1970s onwards as the traditional Fordist organisation of mass production of standardised products became less profitable. Moreover it examines the search process by which car makers sought to cure Fordist ills. In doing so this chapter emphasises the variety and coexistence of solutions and considers the position of ECE in the emergence of competing strategies to ensure continued profitable production. The third chapter investigates the disintegration of the soviet system in ECE. It charts the complex geography of transformation and the development of coexisting forms of capitalist development.

Part two consists of three empirical chapters which examine the transformations of regulation and governance, of production, and of work. They collectively chart the transformation of the automotive industry in Hungary and east Germany. Chapter four begins with the legacy of the soviet automotive industry and goes on to examine the changing role of the state and trade unions in shaping new forms of regulation and governance. Chapter five considers the transformation of

production through an examination of the strategies of foreign automotive capital and indigenous enterprises in Hungary and east Germany. In doing so the chapter introduces the case studies (based mostly on semi-structured interviews) referred to above. The final chapter of part two investigates the transformation of work by focusing on management attempts to reorganise work, and resistance to it by employees. This is also illustrated by referring to the case studies. The concluding chapter examines points of contrast and theoretical significance.

Part I

Transforming production and society

Chapter 2 Fordism, after-Fordism and neo-Fordism: the restructuring of the European automotive industry

2.1 Introduction

Since the early 1970s the dominant model of economic organisation and co-ordination has been in crisis (see Lipietz 1989) and in a period of transformation (see Amin 1994). For many the crisis of the Fordist model, a coupling of a scientific labour process and a specific organisational form geared to mass production with a state-supported mass consumption norm, represented the exhaustion of its social and technical capacity and the limits of its spatial logic. This prompted a search for and the identification of a number of competing post-Fordist forms with new spatial logics. Flexible specialisation (Piore and Sabel 1984), disorganised capitalism (Lash and Urry 1987; Offe 1985), and flexible accumulation (Harvey 1989) were all said to have created 'new industrial spaces' (Scott 1988). However, as the crisis in the co-ordination of the global economy persisted, more emphasis was placed on: (1) the continuation of an essentially Fordist system (Hudson 1989), (2) the coexistence of competing experimental solutions to the crisis in Fordism arising from the increased influence of markets as a means of social co-ordination resulting from the uncoupling of the Fordist regime of accumulation and mode of regulation (see Aglietta 1979, Lipietz 1986) and, (3) the complexity of the geography of 'after-Fordism' (see Peck and Tickell 1994).

The restructuring of the automotive industry has been emblematic in reflecting the problems confronting *Ford*ism and the search for solutions to them (see for instance, Jürgens *et al.*, 1989, Berggren 1993, Morales 1994, Hudson 1994, and

Hudson and Schamp 1995). In particular there were three *dimensions* of change: production technology, co-ordination mechanisms and regulatory systems. First, production techniques were restructured incorporating both flexibility and rigidity or standardisation. Collectively these changes were associated with the adoption and adaptation of the 'Japanese model' (Kenney and Florida 1993) and related 'lean production' techniques (see Womack *et al.*, 1990). Second, co-ordination mechanisms within production filières were refashioned, ranging from the introduction of unfettered markets within firms at one extreme to the extension of hierarchical forms between firms at the other. The third dimension of change concerned regulatory systems and the labour process. At one end of the spectrum was 'Kalmarism', representing negotiated, human centred work regimes whilst at the other was a coercive (neo-)Taylorist model (see Leborgne and Lipietz 1988, 1992). In presenting the restructuring of the industry in this way the intention is to move away from a simple substitution of one omnipotent organisational form for another, say Fordism to post-Fordism, and emphasise instead the complexity and inter-penetration of institutional 'fixes' (see for example, Thrift 1989). Indeed, the restructuring of the automotive industry points to just how elastic Fordism itself is.

This chapter presents an overview of these major dimensions of change in the European automotive industry in order to contextualise automotive investment and restructuring in Hungary and east Germany. In doing so it examines change within the workplace, in other words the organisation of production and labour process but also refers to the broader issue of social regulation. However, first, the chapter begins by

examining the factors which brought the Fordist automotive industry in to crisis in the 1970s.

2.2 Crisis in the automotive industry

The causes of the crisis in the automotive industry can be divided into those which were internal to the industry and its organisational forms and those which were external. There were three, interconnected, key external developments which dramatically shaped the automotive industry. First, the sector was severely effected by the break down of the Bretton Woods financial regulatory system and in particular the cyclical recessions, beginning with the oil crisis in 1973, which temporarily dramatically increased the cost of motoring and many of the industry's inputs. Second, the growing internationalisation of the economy, first in terms of the market and later in connection with production, resulted in greater competition from low-cost producers in less developed parts of the world. Third, diffusion of the 'new orthodoxy' of neo-liberal economics and politics resulted in state policies antithetical to traditional forms of state intervention in manufacturing industry. In large part these three changes formed part of the unwinding of the Fordist period of rapid economic growth and were embedded in structural problems in the Fordist model of industrial organisation.

In the late 1960s the Fordist model of industrial organisation dominant in the automotive industry began to show signs of stress and strain, a reflection of the paradox that co-ordinating a hierarchical organisation required greater hierarchical control which in turn made it more difficult to co-ordinate because of bureaucratisation. Berggren (1989) identified four particular problems with the Fordist

auto industry. First, the specialisation of tasks, in other words the highly detailed technical division of labour (intra-firm) and simple social division (inter-firm) resulted in the disruption of material flows owing to 'balance-delay' problems and 'system losses'. This led to a reduction of productivity and profitability which undermined companies' ability to invest in modernisation. Second, the complex technical division of labour rendered the organisation vulnerable to industrial unrest. Third, the increase in the number of components needed to assemble a vehicle meant efficient sequencing of material flow to the line was difficult. Finally, the monotonous labour process and increasingly oppressive regimes which sought to overcome the co-ordination problems resulted in workers' resistance. As productivity gains in the industry fell the 'solidarity pact' which had ensured that the benefits were shared out between wages and profits broke down, with the result that capital-labour bargaining became increasingly politically fraught. Real wages declined, which threatened future consumption and profitability, and generated high levels of industrial unrest, in particular in the UK (see Beynon 1984) and Italy (see Amin 1985), which reduced productivity and profitability even further and made modernisation even more difficult. In particular this reflected the limitation of the geography of the industry in which the value-added chain was concentrated within firms and in single plants which generated local barriers to change.

As a result of these developments profitable car manufacturing in some parts of western Europe was no longer possible by the mid-1970s. However, the geography of the break down of the classic Fordist model of industrial organisation was highly uneven. Largely due to different capital-labour relations and systems of allocating and regulating labour, productivity varied highly between different plants within and

between companies and countries. Also, since some of the major car assemblers were either partly or wholly state owned, national politics played a significant role in the management of the crisis in the industry in different countries.

In the course of the 1970s the market for cars was dramatically refashioned in three ways which contributed to generate simultaneous market segmentation and homogenisation. First, national markets in western Europe became increasingly mature and saturated (see Dankbaar 1984). As a result vehicle makers designed 'planned obsolescence' into their model development and concentrated on stylising cars and image creation. These strategies sought to segment a mass market but this implied a change in the mass production of standardised models utilising purpose-built technology (see Schoenberger 1987). As a result the competitive strategy employed by car assemblers became almost as important as how the cars were made. Second, the traditional pattern of isolated national markets in western Europe in which domestic firms, and often a single 'national champion', dominated was gradually undermined, albeit to differing extents, by the Europeanisation of the car market. The result was the internationalisation of the market and the standardisation of models directed to various national markets. At the same time there was the growth of new low-cost automobile producing regions within Europe, in particular in the Iberian Peninsula, which intensified competition (see Lagendijk 1994). Thus the Europeanisation of the automobile industry contributed to the problems the industry faced. This was not unrelated to the third change, the rise of Japan as a major constructor and trader of automobiles. Thus whereas in 1960 just one per cent of global car production was in Japan, by 1985 this had increased to 27pc. In addition

the main companies, Toyota, Nissan, and Honda, were very successful in winning market share in western Europe claiming around 10pc by the mid-1980s.

The success of the Japanese auto makers was fuelled by a highly efficient production model based on the concept of 'just-in-time' rather than 'just-in-case' (see for instance, Child-Hill 1989, Jürgens *et al.*, 1985, Sheard 1983, Turnbill 1987, Sayer 1986). It involved the introduction of flexibility to an essentially Fordist system by substituting greater control over the social division of labour in place of rigid control over the technical division of labour. The effect was to institute a multifaceted strategy of simulating automation by the fluid utilisation of assets at the same time as enforcing authoritarian control or so called 'responsible autonomy'. As a result far from representing a post-Fordist system the Japanese model represented the intensification of Fordism or 'neo-Fordism' (Leborgne and Lipietz 1988). The Japanese system centred on low levels of vertical integration, close linkages with major suppliers and high intensity of work. Together these contributed to create a highly efficient system based on waste elimination (cost reduction) and cost displacement. Waste elimination involved speed up of production (reducing work-in-progress), build-to-order and design-to-build concepts of model development, and simplified manufacturing operations. Cost displacement amounted to the creation of 'core' and 'peripheral' workforces, sets of suppliers and production spaces. As a result the integrated core 'partners' in the production system were protected from risk at the expense of the disintegrated peripheral workers, suppliers and spaces which were burdened with uncertainty. This created a 'workfare' production system which only socio-economically supported the core of the production web leaving the rest to be

sustained in other ways (through other production systems, casual or family labour, or welfare, for example).

The efficiency of the Japanese producers and their success in winning market share in western Europe resulted in an increase in competitive pressures in the industry. This was heightened by the establishment of a number of 'transplants', mainly in the UK (see Hudson 1992), to avoid market protection measures introduced by the European Union in order to support the indigenous industry (see Dicken 1992, Sadler 1992). This had two effects. First the construction of new capacity for 800,000 units per year by the Japanese worsened the problem of over capacity in the west European industry. As a result by the late 1980s there was estimated to be eight million units of over capacity in western Europe (Womack *et al.*, 1990). Second, the 'transplants' illustrated the widening gap in productivity between the Japanese transplants and existing west European plants; by 1991 Nissan produced 21.7 cars per employee per year compared with 4.5 at Ford (Hudson 1992, 78).

Crucially then the geography of the crisis in the industry was uneven. The crisis was first evident in the UK in the late 1970s and was most destructive there in part due to the application of neo-liberal inspired market-led restructuring policies (see Willman 1984, Scarborough 1986). In the course of the 1980s the crisis spread to other parts of western Europe. After the UK, France and Italy were next to enter the crisis which led to state-managed support for restructuring and to maintain the industry (see Oberhauser 1987, 1990, Savary 1995, Conti and Enrietti 1995). By comparison the crisis, at least in employment terms, in 'neo-corporatist' countries, such as Germany

and Sweden, was much more restricted and occurred later largely because they succeeded in establishing a 'modernisation pact' and specialised in highly engineered high value added products for the upper end of the market. However, by the late 1980s and early 1990s both industries faced problems and 700,000 job losses were predicted in Germany (see Auer 1993). As a result in the late 1980s and early 1990s virtually the entire west European automotive industry sought solutions to its crisis.

2.3 Experimental rather than emergent solutions

The UK auto-industry, led by the neo-liberal Conservative government, was the first to seek solutions to the crisis in the industry. First amongst them was the strategic alliance that was forged between Rover (formerly known as British Leyland) and Japan's Honda[1]. More significantly the UK government also encouraged investments by Nissan (see Garrahan 1986, Garrahan and Stewart 1992, Hudson 1992, Dicken 1987) and later by Toyota and Honda (see Hudson 1995). Above all these investments, and responses to them, such as Ford's 'After Japan' programme, illustrated the 'Japanisation' of the auto-industry (see Oliver and Wilkinson 1988). If the UK's almost wholesale adoption of the Japanese industrial system represented the intensification and extension of the Fordist model (neo-Fordism) then the strategies employed in Sweden, in particular by Volvo, represented the other extreme, a non-Fordist solution. Whereas the Japanese model centred on the establishment of *external* flexibility, the government supported Swedish model, or 'Kalmarism' (Leborgne and Lipietz 1988), was based on *internal* flexibility generated by 'human centred' regimes of work (see, in particular, Berggren 1993). The assembly line was

[1] Rover's strategic alliance with Honda was terminated in 1994 following BMW's takeover of the British firm.

replaced by a 'dock' assembly system which was accompanied by the introduction of longer task cycles, enriched jobs and relatively autonomous group work. However, in the course of the late 1980s and early 1990s Volvo's and Saab's innovative assembly factories were closed having operated for a relatively short period (see Malmberg 1995). Nevertheless, the Kalmarism experiment had longer lasting and wider influence elsewhere, in particular in West Germany.

With the apparent failure of 'Kalmarism', the intensification of Fordism became the dominant driving force behind the restructuring of the west European automotive industry. One book, *'The machine that changed the world'*, played a huge role in establishing the parameters of change, and termed them 'lean production', based primarily on techniques associated with Japanese producers (Womack *et al.*, 1990). However, it would be wrong to *essentialise* 'lean production' since it became clear that what was meant by 'lean' depended on a host of circumstances beyond the production floor. As a result the 'trimming' of production systems resulted in paradoxical outcomes. There were, though, three key dimensions of change: production technology, intra- and inter-firm co-ordination, and social regulation. It is to these three dimensions that we now turn.

Production technology: flexibility and rigidity (standardisation)

The need to increase the responsiveness of the Fordist industrial system involved the selective and often simultaneous introduction of flexibility and increased rigidity or standardisation. Two different technological strategies were pursued: first, increased rigid automation and second, increased reliance on the flexible use of technologies and labour. Initially, some west European firms, in particular Fiat and VW, tried to match Japanese levels of productivity by investing in standardised automation systems and made attempts to extend the use of automation to include more of the assembly process. However, both abandoned that approach following their inability to secure sufficient returns to cover investment as production runs were shortened owing to changing market conditions. As a result they began to focus more on the organisation of production and labour. Elsewhere firms invested in flexible manufacturing and computer integrated manufacturing systems which permitted technology to be used in the production of successive models and increasing number of variants. Hence there was a growth of programmable technologies (see Schoenberger 1987). However, the level of automation varied in different parts of the production process. The level of automation was increased in body shops, employing programmable robots assembling different model bodies, but remained constant - or fell - in final assembly and trim as companies relied on more efficient use of suppliers and labour through, for example, 'just-in-time' and 'systemofacture' (Kaplinsky 1988). The need to have flexible stamping capacity, permitting rapid changing of dies, was central to facilitating flexibility down stream in the production process.

These changes meant that vehicle assemblers began increasingly to concentrate on core processes, the development of design concepts and the production of vehicle bodies, and to out-source other activities (see below). This had important implications for the geography of the industry as core competences remained spatially concentrated and peripheral ones were decentralised. The blend of changes resulted in the 'hollowing-out' of core historic plants, such as Renault's Billancourt which was closed, Ford's Dagenham plant which was partially closed and VW's Wolfsburg head quarters plant which remained under threat of closure, and elsewhere the proportion of value-added in assembly plants was reduced. This trend had two impacts. First, the reduction of vertical integration in assembly companies resulted in the proportion of employees in suppliers increasing (see Auer 1993), and the sourcing of components from low-cost locations. This process involved not only the out sourcing of components but also of research and development functions. This was part of a broader strategy employed by vehicle makers to reduce development time and cost per model whilst the number of models increased. First, assemblers began to synchronise the design and tooling stages in a model's development, second they encouraged the input of those involved in manufacturing in the design process to permit 'design-to-build' and prevent over engineering, and third, they placed greater responsibility for designing components on to key suppliers. These changes resulted in a change in the focus of the development process from engineering to cost, as models were designed to a target price suitable for the intended market segment.

Second, there was a move towards the standardisation of key components across models. VW, in particular, pursued a 'platform' approach in which four

standard chassis designs, so-called 'world chassis', were used as the basis of models in four different sizes across its four different European marques. As a result even the smaller producers introduced models in all the major market segments and the launch of new model ranges was accompanied by a large number of variations (for the example of BMW see Schamp 1991). Producers were able to place greater emphasis upon mass customisation, the stylising and differentiation of standard products. Also there was a contradictory trend towards concentrating on high value-added products at the same time as offering models in all of the major vehicle sizes. Thus BMW and Mercedes-Benz began to concentrate on developing high quality products in the small car market segment. In addition manufacturers began to produce new *niche* products (such as multipurpose vehicles (see Ferrao and Vale 1995), multi-passenger vehicles (such as the Renault-Matra 'Espace') and off-road vehicles). However, to emphasise the variations in the strategic solutions that different companies sought to overcome the industry's crisis, Ford pursued a typically Fordist standardisation strategy through the design and launch of the 'Mondeo' 'world car' and the reorganisation of its corporate structure to enable the production of 'world cars' in each of the main market categories. At the same time Ford also acquired a luxury car maker, Jaguar of the UK, which gave it its first presence in the upper-end of the market in Europe. Thus the majority of assemblers simultaneously pursued a strategy combining both mass and niche production.

Intra- and inter-firm co-ordination: hierarchies and markets

To overcome the apparent problems of organising complex traditional Fordist production systems automobile producers introduced new forms of co-ordination and

control. In order to undo the bureaucratisation associated with the problems of Fordism, companies 're-engineered' their businesses by introducing a *new* blend of markets and hierarchies grounded in different organising principles than in the past.

This was closely connected to the increase in the complexity of and difficulty in co-ordinating organisations as production systems were internationalised. Internationalisation represented the intensification of the Fordist segmentation of the production process in which different operations were located in different labour markets (through acquisition and greenfield investments) within and between countries. As a result there was a growth of investments in the UK, southern Europe (see Lagendijk 1994, 1995a, 1995b) and later east and central Europe (see Nestorovic 1991, Harwitt 1993, Swain 1992a, Sadler *et al.*, 1993, Sadler and Swain 1994). However, above all there was a trend to relocate production from high-cost to low-cost locations at different geographical scales. The result was the simultaneous trend towards greater functional integration and greater institutional disintegration. At the corporate level the major producers internationalised their production systems, albeit to various extents and in different ways, and sought to foster greater functional integration between different parts of the company. Thus GM Europe increased the level of integration between its main subsidiaries, Opel in Germany and Vauxhall in the UK, and VW Group, Europe's only true indigenously owned automotive multinational company, began to increase the level of co-ordination between its four different 'marques', VW, Audi, Seat and SKODA (see VW 1991). Significantly, and connected to this, as the market became ever more competitive automobile assembly companies identified opportunities for co-operation with each other. The result was a partial

diminution of market relations between companies as competitors identified fields for potential co-operation and formed joint ventures and strategic alliances (see Ferrao and Vale 1995, Savary 1995, Anderson 1992).

However, greater functional integration at the corporate level was compensated for by institutional disintegration within the company as intra-firm hierarchies that had become bureaucratic were loosened and undone through the introduction of new market forms of co-ordination. As a result some automobile assemblers separated their component production plants and regrouped them together in pan-European and pan-global subsidiaries, some of which specialised in the production of particular types of components (such as GM's Packard Electric which concentrated on wiring harnesses). Within and between assembly plants companies introduced systems designed to increase the transparency of intra-firm transactions and establish a basis for so-called 'bench marking', from which comparative performance indicators could be identified. Parts of companies, subsidiaries, plants, divisions and increasingly teams, were transformed into 'profit centres' placed in competition with each other, whose effectiveness was measured in crude financial and market terms. Despite the application of market forms of co-ordination, as rationalisation proceeded corporate politics (and also in some cases state politics) continued to interfere with crude market determined decisions.

The co-ordinating mechanisms between car assemblers and their suppliers were also reformed, and mirrored the blend of hierarchies and markets established within companies. Indeed as assemblers reduced the level of vertical integration and placed

greater responsibility on key suppliers, the co-ordination of suppliers became even more significant and had important implications for the geography of the industry. The traditional regional concentrations of automobile companies and their suppliers, for example in the west Midlands in the UK, north central Italy, south west Sweden and various local concentrations in Germany (including Mercedes Benz around Stuttgart (see Schamp 1995)), were gradually undone as new procurement policies introduced market competition by moving towards national, international and 'global sourcing'. The result was the reorganisation of the European automobile components industry as major suppliers mimicked assemblers by internationalising production and concentrating on their core competences (see Sadler and Amin 1995). At the same time to ease the burden of co-ordination, assemblers sought to reduce the number of direct suppliers to their plants. However, given the significant role that direct suppliers were required to play, such as in pre-assembling modules and systems, relations between them and assemblers were bureaucratised and became hierarchically co-ordinated, and supplier plants became more integrated with assembly plants through more exacting quality and logistical requirements (such as, but not exclusively, 'just-in-time' logistics). As a result relations with key suppliers were governed not only by markets based on the prices of components but also, and increasingly, by other factors such as competence and reliability. Thus relations between assemblers and suppliers were transformed, based on trust, negotiation and 'voice' rather than crude financial criteria, and involved contracts lasting the lifetime of a model. However, the balance between co-operation and competition varied between companies, product lines and between different types of market conditions.

The result of these events was the creation of a 'first tier' of privileged automotive component suppliers which were highly integrated with different assemblers. The first tier of suppliers contained two types of firm which reflected two types of purchasing strategy: those assemblers which had used a 'global sourcing' strategy as a means of identifying direct suppliers (for example GM Europe) and those which identified key suppliers and then pursued a global-local sourcing policy (for example VW Group). Thus the first tier comprised, first, a number of international industrial conglomerates which supplied the automotive industry, in addition to other industrial sectors, and which specialised in particular product lines and which sought to concentrate production of particular parts in large 'branch plants' in low cost locations to supply customers across Europe (see Sadler 1991). Second, it comprised a group of producers which was dedicated to one or two particular assemblers or plants, frequently having supplied them for many years having originated from the same home base as the assembler, and which concentrated on the assembly of systems and modules, such as seats. The location of such plants close to assembly plants raised the prospect for some of a regional reconcentration of production but even where this occurred it represented a small proportion of the value-adding chain.

However, whereas market relations were partially curtailed at the top of the pyramidal supply structure, further down market relations were rigorously enforced as direct suppliers were encouraged to pursue global sourcing strategies of their own. Thus the 'first tier' suppliers introduced more market based forms of co-ordination between them and their sub-suppliers in the 'second' and 'third tiers'. These smaller suppliers increasingly became subcontractors on short-term contracts, which included

few price and volume guarantees, and which competed with low-cost producers in the Far East and increasingly with parts of east and central Europe. Thus the governance of the industry was restructured as a new and subtle combination of hierarchies and markets was introduced to re-engineer production systems in which new patterns of co-ordination and control redefined the relations between the technical and social division of labour.

Social regulation: coercion and negotiation

The crisis in the traditionally Fordist automotive sector was first reflected in industrial unrest in the industry. As a result, throughout the assembly and supply industry, working practices and industrial relations were restructured which involved a combination of authoritarian coercion and negotiation. This occurred at the same time as there was a large reduction in the number of employees (see Auer 1993, 13). Employment in the UK automotive industry, for example, contracted by 55pc between 1974 and 1991. This compared poorly with France, which lost 19pc and Italy where employment in the industry fell by 15pc. By comparison employment in the German and Swedish automotive industries increased in the same period and in the case of Germany reached a peak of nearly 800,000 in 1991, thanks in large part to the post-unification boom. However, by this time warnings of mass redundancies were becoming common. Thus 57pc of all job losses in the west European automobile industry were in the UK. Against this back drop, which severely weakened the influence of workers and trade unions (TIE 1991), companies pursued two strategies designed to refashion capital-labour relations; first, *in situ* change through the 'greening of brownfield sites'[2] and second, the relocation of operations to new labour

markets to permit experimentation with new forms of labour organisation. The outcome of these changes depended in large part on the institutional arrangement of industrial bargaining and interest representation more broadly in different west European countries. Thus Leborgne and Lipietz (1988, 1992) identified different types of capitalism in western Europe ranging from the highly negotiated 'Kalmarism', through the 'neo-corporatist' West German model and 'Toyotaism' to the highly coercive neo-Fordist model exemplified best by the UK.

Assemblers and suppliers alike sought to renegotiate the labour process in existing factories. There were two coexisting, contradictory and therefore often conflated approaches. First, there was an emphasis on the humanisation of work through increasing the level of employee participation in the production process, leading to notions of 'enterprise democracy' and 'industrial citizenship'. This was variously associated with the lengthening of cycle times (in Germany for example), Japanese inspired techniques (coercive team working, the polyvalent worker, suggestion schemes and corporate identification) (see Mueller 1992, Garrahan and Stewart 1992, Stewart and Garrahan 1995), and also the Kalmarist model of autonomous group work (see above). Second, and related, management sought greater control over the labour process through reducing the power of employees and the introduction of new working practices such as continuous improvement and total quality management. These two developments generated two contradictory interpretations of labour process change, one which celebrated the increased involvement of the worker, and another which pointed to the intensification of labour

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[2] I am indebted to Tim Strangleman for this phrase (see Roberts and Strangleman 1995).

and the 'desubjectification' of workers. In practice there was a simultaneous, and inter-connected, increase *both* in the participation of workers in the production process, rigorously institutionalised and corporate centred, *and* in management control over the labour process. However, the balance between the two trends varied greatly within the industry.

In the neo-Fordist UK, unions were weakened and there were moves to single-union and non-strike labour agreements, as pioneered by the Japanese transplants (see Hudson 1992). In contrast, union influence in Germany was preserved through the establishment of a 'modernisation pact'. However, by the beginning of the 1990s even in Germany the system of co-determination was under threat. In particular the impending crisis in the industry resulted in the substitution of internal labour *markets* (in which workers competed for scarce employment security) where there had once been internal labour *reserves* (made up of unskilled, usually foreign workers, laid off in poor market conditions) which threatened to undermined traditional co-operation between management and employees.

Across Europe there was a trend to the incorporation of labour and its representatives and the growth of 'business trade unionism' as unions accepted the need to restructure in order to compete with and match the most efficient plants. Thus the introduction of new management techniques accompanied new working practices, which undermined the ability of workers and their representatives to influence work. This was most noticeable in West Germany where new 'lean' forms of organisation conflicted with an established collaborative industrial relations system. Elsewhere,

resistance by auto workers to the new techniques was much more muted. However, even in West Germany, the automotive workers' union, IG Metall, began effectively to accept that the German model, which had been regarded as the cause of its success in the 1980s in the face of contraction elsewhere in western Europe, had become a barrier to the successful adoption of 'lean' working methods (see Auer 1993, Jürgens 1993a, 1993b). As a result IG Metall effectively adopted team work preferring to interpret it as humanising work in spite of the threat it posed to the role of the works council, the basis of co-determination and union influence in the industry.

New work practices and systems of labour organisation undermined traditional 'sites' of worker influence by changing job descriptions, reducing the number of types of job and abandoning old methods of communication, as a way of reducing occupational identity and influence. The result was a shift away from the line management of skilled specialists to the 'management by stress' of semi-skilled generalists with fluid demarcation boundaries. At the same time new systems of labour organisation were introduced which increased the transparency of work, permitting new forms of surveillance (as part of the opening up of labour organisation to the influence of markets), and institutionalised worker interests through teams, quality circles, and visualisation, in such a way as to align them with the company. This contributed to a process of 'desubjectification' as workers subjectivity was redirected from one centred on *work* and which extended *beyond* the plant to one centred on *performance* and *confined* to the corporate mission. In this way management sought new ways to incorporate labour into capital's project (see Stewart and Garrahan 1995). However, the nature of work, in terms of the tasks required of workers, did not

fundamentally differ from traditional Fordist plants (see for example Garrahan and Stewart 1992). As a result employee resistance remained and resulted in moves towards the establishment of European works councils and other forms of international collaboration amongst workers (see Sadler 1995) and in the case of VW the successful negotiation of a work-share scheme as a way of implementing lean production and avoiding redundancies.

The threat of closure, and bench marking between comparable plants, was an important weapon employed by management to establish new working practices but the relocation of production to greenfield sites was equally important. Thus Fiat in the 1970s relocated production away from its militant bases in Turin in favour of non-unionised agricultural areas in the south (Amin 1985). Likewise, Citroen and Renault pursued similar strategies by decentralising production (see Oberhauser 1987, 1990). In addition to the decentralisation of the industry at the continental scale (see above) there were two geographical trends at the national scale. These were the location of plants in rural areas in order to recruit 'green' labour, and in declining industrial regions, often without a tradition in the automotive industry, which attracted large state subsidies. In both types of location companies sought to forge new forms of working practice and industrial bargaining procedure. In the main these were based on Japanese inspired 'lean' principles with the exception of Mercedes-Benz's new plant at Rastatt in west Germany which was more reminiscent of Volvo's Kalmarism (see Jürgens 1993a). In addition, the out sourcing (see above) of value-added processes to less privileged and weaker workers in supplier factories was one means of escaping and reforming social regulation.

Thus the restructuring of the social regulation of labour in the automotive industry represented the outcome of capital-labour struggles in different institutional settings. The result was the coexistence of work intensification and coercion with varying degrees of worker involvement and negotiation, but as the early 1990s proceeded these two trends gradually combined to forge fundamentally new ways of controlling labour across the west European automotive industry

The role of east and central Europe in the automotive industry in the 1990s

The changes in east and central Europe introduced in chapter one opened a range of new possibilities for automotive producers. After 1989, attracted by the prospect of lower cost production and the opportunity to experiment with different production methods (to discover what might be possible in plants back in western Europe) a new round of investment rapidly took shape. By 1993 auto firms had invested around USD4bn in east Germany and a further USD1.9bn elsewhere in ECE, including USD0.9bn in Hungary and USD0.8bn in the Czech Republic. This investment formed a significant proportion of total direct foreign investment in the region (Table 2.1). However, as the new round of investment took shape the amount of investment earmarked for the region reduced and was increasingly directed to the more stable countries there (see Table 2.2). By mid-1992 plans existed for the construction of 1.2 million automobiles annually in ECE (see Swain 1992a, Sadler *et al.*, 1993, Sadler and Swain 1994). This figure had inceased to more than 2 million units by the end of 1995 (Table 2.3). As a result in the same way that the Japanese 'transplants' in the UK played a central role in the restructuring of the auto industry in

the mid-1980s, so the new round of investment in east and central Europe, including the so-called 'German transplants' in eastern Germany based on 'lean production' (Jürgens 1993a) seemed likely to play a significant role in shaping the geography of automobile production in east and west Europe.

2.4 Conclusions

Thus whereas there was a broad spectrum of experiments which sought to cure the ills of traditional Fordism, increasingly the west European automotive industry saw the adoption and adaptation of Japanese inspired 'lean' production as the most likely cure. This was all the more the case following Volvo's and Saab's abandonment of Kalmarism. Although the employment of 'lean' production generated contradictory and co-existing outcomes, the general diffusion of techniques representing the development of a neo-Fordist organisational form could be identified. However, it remained to be seen whether other experimental solutions would develop and thrive in the new market environment.

Table 2.1 Direct foreign investment in east and central Europe, 1993

Country	Total DFI ($m)	Auto industry DFI ($m)	% of total auto	Auto as a % of total DFI
Hungary	5,600	900	52	16
Poland	3,000	180	10	6
Russia	2,500	20	1	1
Czech Republic	2,100	770	41	37
Ukraine	700	0	0	0
Romania	600	0	0	0
Kazakhstan	500	nd	nd	nd
Belrus	400	0	nd	0
Slovak Republic	350	30	2	9
Slovenia	350	nd	nd	nd
Other	1,000	0	0	0
Total	17,100	1,900		11

Source: after Sadler and Swain 1994, 395

Note that $4bn had been invested in the auto sector in eastern Germany.

Table 2.2 Auto-related capital investment earmarked for east and central Europe (estimates)

Country	1992		1993		1994	
	$bn	% of total	$bn	% of total	$bn	% of total
CIS	9.7	37.3	2	13.7	1	11.1
east Germany	7.3	28.1	5	34.2	3.5	38.8
Czech Republic	4	15.4	2.5	17.1	0.8	8.8
Poland	3.2	12.3	3.2	21.9	2	22.2
Hungary	1	3.8	1.4	9.6	1.6	17.7
Slovakia	0.8	3.1	0.5	3.4	0.1	1.1
Total	26		14.5		9	

Sources: various

Table 2.3 Additional automobile assembly capacity in east and central Europe, end-1995

Company	Partner	Location	Capacity ('000s)	share (%)	value ($)	Start-up date
Fiat	FSM	Bialsko Biala, Poland	280		180m	1992
VW	IFA-VEB-SAW	Mosel, Germany	250	100	3.1bn	1990
VW	Skoda	Mlada Boleslav, Czech R	220	50.5	2.3bn	1991
Daewoo	Oltcit	Craiova, Romania	200		950m	1994
Daewoo	Tartarstan authorities	Yelambuga, Russia	200		500m	
Daewoo	Uzautoprom	Assake, Uzbek.	200	50	658m	1996
Daewoo	FSO	Warsaw, Poland		70	1.1bn	1995
GM	IFA-VEB-AWE	Eisenach, Germany	150	100	450m	1991
Peugeot	FSL	Lublin, Poland	115			
GM		Cracow, Poland	100	100	375m	1997
Honda	Irtysh Machine Building	Ust-Kamenogorsk, Kaza.	70		-	
Suzuki	Autokonzern,C.Itoh, IFC	Esztergom, Hungary	60	40	300m	1992
GM	RABA	Szentgotthard, Hungary	50	67	65m	1992
Renault	IMV	Novo Mesto, Slovenia	50	54	180m	1994
GM	FSO	Warsaw, Poland	10	70	12.2m	1994
VW	BAZ	Bratislava, Slovakia	30	80	32.5	1991
Fiat	Pavlodar Tractor Fac	Pavlodar, Kaza.	30			
Ford		Plonsk, Poland	30	100	54	1995
Rover	Domostroene	Varna, Bulgaria	10	49	120	1995
Volvo	GAZ	Nizhniy Novgorod, Rus	10			
Total			**2,035**		**10,322.7**	

Source: various

Chapter 3 The uneven regional development of 'emergent', 'constructed' and 'embedded' capitalism in east and central Europe[1]

3.1 Introduction

The (alleged) 'transition to capitalism' in east and central Europe (ECE) was dominated by a neo-liberal *constructivist* orthodoxy (conveyed by Anglo-American academics and multilateral institutions (see especially Sachs 1990, 1993, Fukuyama 1992)) that was rather reminiscent of Lenin's own 'socialist construction' earlier in the century (see Hausner 1995). The construction of capitalism, it was alleged, comprised a technocratic four-stage process: (1) the establishment of the 'right' formal institutions (marketisation and private property), (2) the reformation and/or termination of the 'wrong' formal institutions (the 'hollowing out' of the soviet state and democratisation), (3) the introduction of the 'right' prices to unleash the necessary market signals and incentives to re-orientate behaviour in order to create the informal institutions needed for capitalism to emerge in the systemic vacuum created by the disintegration of the soviet system, and (4) the convergence of development in east and west Europe through integration with the global economy.

This prescription plunged the region into an unprecedented spiralling economic crisis (see for instance Gowan 1995). The disintegration of CMEA and its disruption to production systems resulted in decreases of national output of up to 40pc. The absence of co-ordinated state-led industrial restructuring prevented enterprises from investing in modernisation and compelled them to compete on the basis of low labour costs. In addition inflated price increases, which followed

[1] This chapter develops, in part, ideas first presented in Smith and Swain (1995).

economic liberalisation, reduced real wages and created a large pool of under- and unemployed people. The supply-side crisis led to a reduction in consumption (and growing social inequality (see, for the case of the CIS, Piirainen 1994)) which in turn resulted in a fall in investment and the degeneration of the existing capital stock (EBRD 1995). The neo-liberal reform programme (whether rapid or gradual) hindered rather than assisted regions' adaptation to marketisation. The continuing crisis led to the election in a number of countries of former communist parties, and criticism of the neo-liberal approach from institutional and evolutionary perspectives (see for instance Amsden *et al.*, 1995, Balabanov 1994, Pejovich 1994, Poznanski 1995). In particular, neo-liberal capitalism (1) failed to *embed* (see Granovetter 1985, 1992, Grabher 1993, 1994a) in the social fabric, (2) intensified socio-economic fragmentation bequeathed by the soviet system thereby perpetuating *dis*embedded development, and (3) resulted in highly divergent paths of regional development.

The post-soviet 'transition to capitalism' unevenly destroyed the region's socio-economic fabric and transformed a *systemic crisis* (the disintegration of the soviet system) into a *post-systemic crisis* (the failure to *embed* new mechanisms of integration and co-ordination). This arose out of the collapse of the soviet system, which resulted from social forces implicated in the inherent contradictions of the system and which consequently failed to generate the *transformatory* social forces required to articulate *and* construct a capitalist vision (see Bauman 1992, 1994, Dahrendorf 1990). The development of an alternative system was necessarily interactive with and contingent on existing conditions; in other words *the output of transformations (conflicting strategies) rather than the outcome of transition (design)*

(see, for instance, Stark 1992a, 1993, 1995, Burawoy 1992a, Nielsen *et al.*, 1995, Hausner *et al.*, 1993, 1995, and Kregel *et al.*, 1992). Therefore transformations were simultaneously path-shaping and path-dependent. Not least they depended on a state or region's *path of extrication* from (see Stark 1992b) and enduring legacies of the soviet system (see for instance Bryant and Mokrzycki 1994).

As a result the neo-liberal policy formula intensified the regulatory deficit inherited from the soviet system. Three co-existing types of capitalism could be identified. First, there was the emergence of primitive capitalism based on 'insulated' development overly embedded in inherited legacies of the soviet system. Second, the neo-liberal reforms resulted in 'isolated' development which was globally regulated but locally disembedded and which resulted in and depended on heightened uneven development. However, third, post-soviet transformations also resulted in 'embedded' capitalisms which were regionally integrated and self-sustaining and had the potential of overcoming the post-systemic crisis.

The chapter therefore seeks to reconcile regulationist (see Altvater 1993, Smith 1994, 1995) and socio-economic accounts of change in ECE. It emphasises that economic activity is constitutive of mechanisms of self-organisation (governance, markets and hierarchies) which are embodied in networks of institutions which are territorially constituted (Amin and Thrift 1994a) and which necessarily simultaneously permit accumulation and regulation strategies as part of the same process (see Offe 1995, Jessop 1995a). The chapter presents an overview of these three major types of capitalist development in east and central Europe. It concentrates

on the development of industrial systems and addresses the complex and fragmentary geography of transformations in order to contextualise the restructuring of the automotive industry in Hungary and east Germany. However first, the chapter examines how the soviet system painted socialism (Burawoy 1992b, Burawoy and Lukács 1992) a legacy which proved crucial in over determining post-soviet transformations which contributed to *painting capitalism.*

3.2 The soviet system

Behind the façade of regulation and order, the formal elements of the soviet system were poorly co-ordinated which resulted in the generation of compensatory informal relations which initially maintained the system but ultimately led to its disintegration. High vertical integration combined with a *regulatory deficit*, *functional overembeddedness* and *regional disembeddedness*, generated a poorly co-ordinated system *which painted rather than embedded socialism.*

The soviet system was hierarchically and bureaucratically regulated but poorly co-ordinated. There were two socio-economic co-ordination mechanisms. First, a compulsory bureaucratic *planning* system (see Kornai 1992) in which constituent institutions (planning bodies, state owned enterprises and workers) were hierarchically arranged (see Bahro 1978). Second, the fusion of economic and political power (see Altvater 1993) created a hegemonic regime which held constituent institutions in *tutelage* which denied the development of other institutions through *atomisation* (Filtzer 1986). The result was the development of a quasi-Fordist economy (a 'scientific organisation of work'; see Kössler and Muchie 1990) and an extensive

mode of growth which was adapted to the needs of planning (resulting in an industrial system comprising a small number of large vertically integrated enterprises, structured along one organisational model, and hierarchically integrated so as to restrict the complexity of transactions between enterprises) rather than the needs under which planning was justified (see Burawoy 1985). The two co-ordination mechanisms became increasingly ineffectual with the result that industrial systems were poorly integrated.

This was for three reasons. First, despite the rigid plan, enterprises were not required to meet efficiency targets, owing to 'soft' budget constraints, which in turn encouraged them to maximise inputs and minimise outputs. Thus there was a tendency towards the hoarding of resources and the creation of an economy of endemic shortage (see Kornai 1980, Burawoy 1985). Second, implementation of the plan depended on atomised, dependent and exploited state employees with only a marginal interest in the appropriation of surplus product (see Konrad and Szelenyi 1979, Filtzer 1986, Clarke *et al.*, 1993), Third, since the system relied upon a structural form of control in which its constituent parts were not only dependent but were also deprived of the institutionalised means of influence or self-organisation, there was a lack of collective and individual responsibility. This was encouraged by: (1) workers' high security of employment, (2) the creation of monopolistic enterprises, and (3) the grounding of social relations in bureaucratic rather than economic relations (see Hausner n.d.). As a result the system was not *habituated* and individuals and informal institutions pursued strategies of self-enhancement and plan-circumvention.

In sum the system exhibited the regulation paradox; namely that greater hierarchical control required bureaucratisation which made control even more difficult.

To overcome production irregularities arising from the limitations of the plan and to counteract the atomisation of institutions, informal bargaining developed (albeit to differing extents in different countries and sectors). Through plan bargaining a shadow plan developed (see Burawoy 1985, Clark *et al.*, 1993) and social relations not prescribed by the soviet system flourished (Stark and Nee 1989) including a tolerated 'second economy' (see especially Stark 1992c). As a result horizontal informal networks developed which permitted and regulated exchanges which were reciprocal over a given period of time (see Voskamp and Witte 1991, Heidenreich 1992, Grabher 1994a, 1995). Three types of informal bargaining networks were particularly significant: between enterprise directors and central planners, amongst enterprise managers and between workers and supervisors. First, enterprises' access to scarce resources in a shortage economy depended on their leverage amongst central planners and their ability to win preferential treatment. This in turn led to increasingly arbitrary and discretionary decisions by central planners which further undermined the integrity of the plan. Second, to overcome supply disruptions directors and supervisors informally networked and transacted 'favours' in order to compensate for production bottlenecks. Thus labour, tools and supplies were exchanged, usually in the form of barter, between production shops and between enterprises in the same local area. Third, the irregularities of work (resulting in 'storming' to meet targets and overcome production bottlenecks) resulted in supervisors entering into informal bargaining with workers to secure their consent

(and tolerating activities counterintuitive to the plan)(see in particular Burawoy 1985, Stark 1988).

However, since the ephemeral informal networks developed in response to day-to-day production problems and did not constitute strategic forms of collective action, they were not formally institutionalised. Thus, for example, whilst trade unions existed in enterprises they acted as 'transmission belts' which conveyed information from the regime to workers and were not permitted to articulate the interests of workers (see chapter 4). As a result informal relations, which were grounded in personal networks, sought not to re-orientate or reform the system (owing to the dislocation of formal and informal relations) but rather to *capture* the plan for sectional (sectoral or local) interests. Thus the networks succeeded in perpetuating the system for a time but could not resolve its inherent contradictions because it was functionally overembedded in social relations which precluded dynamic adaptability (see Grabher 1994b). As the planning system stagnated, owing to its inability to transform the mode of growth from an extensive to an intensive one (see Altvater 1993), the planning system increasingly depended on the existence and the efficacy of informal relations by decentralising economic decision making to individual and groups of state owned enterprises (albeit to different extents in different ECE countries). Instead of resolving the system's regulation problems, decentralisation merely worsened co-ordination and central decisions became increasingly discretionary and unpredictable. In consequence enterprises which depended on informal networks in order to fulfil their formal obligations, became gradually more powerful in relation to central planning authorities and the integrity (predictability) of

the command system declined further (see Hausner n.d.). Thus the system disintegrated from below.

Functional overembeddedness (an inability to evolve in a strategic manner) was matched by regional disembeddedness (deregionalisation) (see Grabher 1992) owing to the centralisation of control and the non-institutionalisation of local informal networks. First, control and planning decisions were exercised by external actors in the 'national interest' in centralised state ministries. As a result industrialisation was forced from above and did not emerge from local social forces (see van Zon 1994). Also the planning system resulted in very high levels of vertical integration (and low levels of horizontal integration) in which autarchic state enterprises were integrated into national and subsequently international production systems (through the CMEA's international production system - such as for automobiles (see chapter 5)). As a result producers did not have forward or backward linkages in the local area beyond the enterprise. Second, owing to the inability of the system to permit the formalisation or institutionalisation of informal relations (because of the need to maintain the regime's hegemony), there was a poorly defined and articulated 'local interest'. As a result strategies of self-enhancement through plan-circumvention (through non-institutionalised informal networks) resulted in exclusionary modes of social action which resulted in social fragmentation that intensified the atomisation of social life. The legacy of up to seven decades of a command planning system was a regulatory deficit owing to functional overembeddedness and regional disembeddedness in which regions were 'locked-in' to a failing system without the means of strategic agency.

3.3 'Emergent', 'constructed', and 'embedded' capitalism and uneven regional development

The collapse of the soviet system represented a rapid acceleration of a process which had existed for at least two decades, namely systemic disintegration owing to a regulatory deficit. The collapse of established formal networks, such as national production systems and the CMEA trading system, merely served to illustrate and exacerbate the *systemic crisis* rather than resolve it. Significantly neo-liberal reforms imposed on ECE by western governments through the World Bank, IMF and EBRD (see Gowan 1990, 1995, Chomsky 1994) and adopted by elites in the east (albeit in different ways and to differing extents), were grounded in exactly the same premise as the Stalinist 'mission regimes' whose 'social constructivism', in the form of forced industrialisation, had never embedded in the social fabric resulting in its failure (see Hausner 1995, and also Grabher 1995). Moreover, the neo-liberal policy formula (reduction of subsidies and state expenditure, liberalisation of prices and privatisation) resulted in the break-up of existing formal (plan) and crucially, informal (bargaining) networks (see Albach 1993). Thus the *statist* approach to transformation, as opposed to *negotiated* (see Bruszt 1995), mimicked the soviet system in adopting alien institutions and introducing 'fictitious' reforms (Hausner n.d.), such as 'pseudo-privatisation', which failed to embed and had unforeseen consequences (see Pejovich 1994). Instead the regulatory deficit was intensified and social fragmentation was exacerbated contributing to the retraditionalisation of society (see Grancelli 1995). In addition the changes in the institutions and the networks of relations between them were crucial in shaping regional development (see Kosonen

1995). As a result regional fragmentation mirrored social fragmentation in being intensified. In consequence regional and local development diverged as uneven development was accentuated.

A systemic crisis had been transformed into a *post-systemic crisis* in which the means to establish the conditions (institutions and regulation) needed for strategic collective action were absent. Post-soviet transformations thus comprised an institutional and *regulatory search process* to establish the conditions necessary for long term capital accumulation. However, this search process had been prematurely curtailed by the neo-liberal agenda which had resulted in the *painting of capitalism* over the top of, and thus disembedded from, emergent primitive capitalism overembedded in the partial transformation (monetarisation and/or marketisation) of inherited social relations. Three coexisting types of capitalism developed in the early 1990s. First, 'emergent' primitive capitalism based on the pseudo-marketisation of inherited soviet social forms and, second, neo-liberal 'constructed' capitalism integrated with the global economy. However, neither of these capitalisms resolved the post-systemic crisis but served to intensify it. There was though a third 'embedded' capitalism based on new forms of regulation and governance, comprising markets and state hierarchies arising out of, but not locked in to existing formal and informal relations. It is to these three types of capitalism that we now turn. In doing so reference is made to three types of regional development: overembedded, disembedded, and embedded.

'Emergent' capitalism: primitive accumulation and overembedded regional development

Neo-liberal 'structural adjustment' policies and the absence of micro-level industrial restructuring (industrial policy) and institutional reform (of the financial system and the state) (see Nielsen 1995) resulted in the *insulation* of existing enterprises from embryonic market signals preventing industrial restructuring. Thus the disintegration of the soviet system and the introduction of neo-liberal policies resulted in simultaneous (re)centralisation of economic control in the hands of state ministries and agencies responsible for privatisation (see Voszka 1995) and decentralisation as the state deserted enterprises by casting them adrift from the plan (see Brada *et al.*, 1994). It generated a stagnant fragmented industrial sector, with declining output and much reduced levels of investment, in so-called 'pre-privatisation agony'[2]. The result was an emergent form of capitalism which represented hybrid organisational forms, *overembedded* in inherited social relations, engaged in 'primitive accumulation'.

Privatisation programmes required the maintenance or re-establishment of central control over the economy in order to permit the distribution of state owned assets (by restitution, vouchers, direct sale - including MBOs and ESOPs - or liquidation). As a result across ECE enterprises were taken under direct administrative control by different arms of the state. Where *de facto* ownership had been devolved to enterprise councils as part of the introduction of self-management programmes in the 1980s, recentralisation amounted to 're-nationalisation' (Voszka

[2] Refers to the inability of enterprises waiting to be privatised to engage in strategic planning.

1995) or étatization (Bruszt 1995). The end of the planning system only served formally to sever links between enterprises and the central industry ministries since dependence on the state continued in the form of reliance on informal and unco-ordinated industrial policy (see Nielsen 1995). Indeed state involvement in industry remained bureaucratic (administrative) but its application became ever more unpredictable and discretionary (unregulated) (in part because of fiscal crisis) and depended on whether enterprises and local areas were able to muster sufficient influence (through establishing local or branch monopolies) to lever central power. Industrial subsidies remained (although at lower levels - and often exercised in the form of debt rescheduling and recorporatisation) and limited the number of bankruptcies and liquidations. The effect was to generate high levels of inter-enterprise debt. In addition, states selectively intervened to manage trade, for example by arranging barter, in certain circumstances. In this way the distinction between 'preferred' and 'non-preferred' enterprises (depending on how important producers were to the regime's priorities) under the soviet regime became more complex. Overall the economy became even more disorganised and poorly regulated than before (see Hausner n.d.). This was closely connected to the simultaneous decentralisation of economic control.

Re-nationalisation coexisted with economic disintegration - the withering away of the state (Burawoy and Krotov 1992) - which resulted in *de facto* decentralisation of economic control involving greater reliance on local formal and informal relations as workers and managers sought to control 'their' enterprises, which they had been told, during the soviet era, they owned but which they could not

control. Many enterprises, convinced that the planning system was the problem, sought autonomy by entering into direct relationships with central authorities thereby breaking away from regional ministries and trusts of enterprises. In this way the industrial sector was fragmented. Continued market failure, owing to the neo-liberal policy prescription which prevented collective strategic action because of uncertainty (Bunce and Csanádi 1993), led to the reintegration of enterprises into bureaucratic relations with the centre. In this way the break up of industrial systems in conjunction with an inability to engage in constructive restructuring (whilst foreign investors received 'tax holidays' and market protection) led to the application of coping strategies which *insulated* enterprises from the regulatory deficit induced by the market failure surrounding them. The social forces underpinning the movements were *clans* which comprised localised alliances within enterprises (between management, core workers and trade unions to maintain the reproduction of the 'labour collective') and between local enterprises and local authorities (see Stark 1990, Clark *et al.*, 1993, Burawoy and Krotov 1992, 1995). The clans resulted in increased integration at the local level, most obviously through the internalisation of production, and the generation of united local or sectoral interests, often involving the establishment of political alliances, to form the basis of enhanced bargaining positions with respect to central state authorities (see above) (see McDermott 1994).

Insulation depended on informal networks from the soviet era which became monetarised and increasingly marketised (see Sik 1992) and represented the development of merchant capitalism based on a class of 'entrepreneurchiks' (see Burawoy and Krotov 1995). This in turn generated so-called 'red-brown' alliances

between 'communist' enterprise directors, former nomenklatura who had exchanged political for economic power, and nascent entrepreneurs (often embodied in the same person) operating in part in the formal (the legacy inherited from the plan) economy and in part in the informal (the criminalised economy inherited from the shadow plan) economy. In particular, localised mercantilist relations developed in which transactions were commercialised without inducing an intensification and restructuring of production (see for instance Burawoy and Krotov 1992, Smith 1994, 1995). In addition, there was the development and growth of the Mafia controlled 'shadow economy' most visibly represented by the growth of privately owned kiosk retail outlets, which in some senses represented the privatisation of privatisation (see Pejovich 1995).

This form of development was particularly evident both in countries such as Russia, where reforms proceeded in a disrupted fashion, but also in countries where marketisation proceeded further and where there was a reintegration of corporatist planning structures (for example the continuation of barter to manage trade between Russia and Hungary and privatisation resulting in reciprocal equity stakes between customers and suppliers - for the example of IKARUS see chapter 5). In both types of development it represented the generation of production systems insulated from the regulatory deficit.

The result was the development of pockets of 'primitive accumulation' (see Nagels 1993) in which accumulation was based on trading (fostered by the differentiation of subsidies and price liberalisation across the region, or in other words

lack of regulation) and speculation. However, the low cost of labour and its increasing availability (as unemployment grew) in conjunction with declining demand and output (deindustrialisation) meant that capital was not substituted for labour, implying an absence of investment even though prices approached world market levels. Instead speculative profits were used to fund conspicuous consumption by a Latin American-style *comparador* elite (see Lomax 1993) which lay at the apex of formal and informal networks. Thus primitive capitalism was a symptom of systemic crisis and a condition of post-systemic crisis and could not provide the conditions for long term accumulation.

'Primitive accumulation' hindered regional development because it resulted in wealth being leached away from productive economies into conspicuous consumption, mostly of imported products. Moreover regional development was overembedded in inherited social relations and 'locked-in', in other words regions lacked strategic 'agency' necessary to re-orientate paths of development. Thus privatisation, in the form of vouchers and management-employee buyouts, failed to create 'real' owners who could discipline management into co-ordinating and intensifying the use of labour and instituted instead the 'absentee owner' inherited from the soviet system (see for instance Mertík 1995). In particular, this allowed 'tight' integration between enterprises at the local and sectoral levels which isolated them from embryonic market signals and the competence of a weak state, with the result that they reproduced and petrified inherited soviet relations of production rather than resolved the contradictions within them (see for example McDermott 1994). In doing so these conditions served certain types of foreign investment well.

'Constructed' capitalism: painted capitalism and disembedded regional development

The neo-liberal advocates believed inward investment would be the engine driving economic development (see Piatkin 1993) and concentrated on establishing the conditions and institutions (legislative regimes) needed to open the region's economies to international flows of capital and goods and allow foreign investors to acquire assets and market share, and establish 'greenfield' plants at little cost in a favourable atomised social environment (see above). In sum the neo-liberal policy agenda generated a forced dependency on foreign investment but the investment attracted was *isolated* from the host region and fostered disembedded development.

Between 1989 and the end of 1993 some USD10.6 billion direct foreign investment (DFI) was sunk into greenfield and joint venture projects in east and central Europe (UNCTAD 1994, 12, see also, for instance, Dobosiewicz 1992, Csáki 1993, Artisien *et al.*, 1993, Michalak 1993)[3][4]. However, whilst the forced dependence of DFI was crucial in shaping 'constructed capitalism' the volume of flows was relatively insignificant (due to the continuing of the post-soviet recession; see Gowan 1995). In 1992 and 1993 investment in ECE comprised just 3pc of global flows of DFI, and the stock of foreign capital in ECE compared poorly with the USD11.1 billion invested in China in 1992 alone (UNCTAD 1994, 12, 14). Moreover, as recession continued the growth of DFI slowed after 1992.

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[3] This figure does not include direct foreign investment in former East Germany or former Yugoslavia.

[4] For a detailed examination of DFI in Hungary see Barta (1993), Wang (1993) and Hamar (1994).

Despite this DFI was significant in shaping uneven development and had important local impacts, not least since a few large projects accounted for a large proportion of investment. Inward investment was geographically concentrated at the national scale, former East Germany (USD12 billion by mid-1992) and Hungary (USD 3.4bn by the end of 1992) receiving the largest portions of investment in the region. At the sub-national scale foreign capital was particularly attracted to capital cities and western regions proximate to the EU's Single European Market (see for instance Murphy 1992). Investment was also sectorally concentrated reflecting the post-systemic crisis. First, investment was attracted to the food/drink/tobacco, retailing and construction sectors which were geared to serving western products and brands to the new elite engaged in conspicuous consumption. The second investment trend involved using ECE as a low cost export production base, and a place to experiment with new forms of production and labour organisation, to compete in the global market place. The sector foremost in this trend was the automobile sector (see Swain 1992a, Sadler *et al.*, 1993, Sadler and Swain 1994).

The forced dependency on DFI (which raised the spectre in political circles of external control) meant that the absence of industrial restructuring was pinned on the low levels of investment - even in Hungary (see Barta 1993). However, in reality DFI had a much more ambiguous role in regional development and the establishment of capitalism. First, in acquiring the most modern and efficient enterprises and integrating them with pan-European production systems, foreign investors undermined indigenous production systems and contributed to the break down of production networks (and the devaluation of 'network capital'; see Czako and Sik

1993) and thus the intensification of the regulatory deficit (see above). As a result, and in large part due to the 'rules of origin' contained in the EU's Association Agreements with ECE countries (see Gowan 1995), the most modern parts of the manufacturing sector were locally disintegrated and reintegrated into western Europe (where some 60pc of the investment originated) on the basis of low labour costs.

Second, the investment attracted to the region was not locally embedded and resulted in specific paths of *disembedded* regional development. Thus in former East Germany, which attracted the largest inward investment, foreign investors transformed production systems in to 'western enclaves' removed from the local social fabric (see Grabher 1992, 1994a). Even where flows of DFI were lower, investment contributed to the same form of development. Thus whilst 67pc of the USD5.3 billion that was invested in ECE between 1988 and 1992 was used to acquire state assets through privatisation, it was significant that the proportion fell from 75pc in 1991 to 53pc in 1992 (UNCTAD 1994, 26-7). As the 1990s proceeded investment in the region was concentrated in greenfield operations isolated from the local environment, whose beneficial impacts bypassed local industry. As a result much of the investment involved the establishment of manufacturing facilities with few local forward and backward linkages; they were 'cathedrals-in-the-desert'. Thus the role of DFI in instituting capitalism in host regions (see Radice 1993) was severely restricted by foreign owned plants' lack of local integration. DFI had limited effect in the modernisation of indigenous industry and even the demonstrative effect of gleaming greenfield factories was undermined by local industry's inability to engage in constructive restructuring. In addition, this limited the propulsive role of DFI in

modernising local industry (through technology and know-how transfer) and sustaining local economic development (Lomax 1993).

Integration into the global economy also involved the generation of an ECU 3 billion trade deficit between ECE and the EU in 1993 replacing the trade surplus that existed up to the late 1980s, and also the 'flight' of capital (including money laundering) from ECE to financial institutions in western Europe and North America. As a result where DFI did not locate, global integration and the painting of capitalism involved unprecedented deindustrialisation and the transformation of production-based regional economies in to (frequently welfare dependent) consumption-based ones. In this way a state of *anomie* was created which permitted certain investment strategies. As a result there was a divergence in regional development (for the case of Slovakia see Smith 1996) which was borne directly from the mode of global integration. Thus investment in ECE was predicated on the dislocation, and deindustrialisation, that the 'transition to capitalism' implied.

DFI had a crucial influence on regional development in ECE not so much in providing an engine of growth (it did not) but in peripheralising the region by reinforcing and intensifying the regulatory deficit and creating disembedded regional development. Thus regional development did not so much involve 'holding down the global' (Amin and Thrift 1994b) as the *global holding down the local.*

'Embedded' capitalism: re-embedding accumulation and regional development

Jessop (1994, 1995b) argued that capitalist transformation involved a two-stage process: (1) disembedding emergent market forces from the soviet 'strait jacket', and (2) re-embedding them into an institutional and organisational framework that could regulate long term accumulation. Whilst the regulatory and institutional deficit was intensified by neo-liberal paths of transformation, there were important differences in the manner in which they developed which raised the prospect of embedded forms of regional development in some parts of ECE. Although all the paths of transformation in ECE were predominantly statist, the balance between state-led and negotiated reforms varied between the different countries (see Bruszt 1995). The most statist and centralised path of transformation was in former East Germany where the power of the West German state made such centralisation possible. Elsewhere transformation was either more chaotic (leading to primitive capitalism; see above) or more negotiated - albeit the rhetoric often exceeded the reality - owing to the weakness of the state. Thus in Hungary, where political change predated 1989, and in the Czech Republic, where the 'Velvet Revolution' occurred (see Rychetnik 1995), transformation was more negotiated than elsewhere involving decentralised reorganisation (see Stark 1993) and tripartite bodies.

The increasing emphasis on a negotiated transformation centred on two developments. First, the neo-liberal programme led to social resistance, fostering the view that capitalism could not simply be imposed by the adoption of alien institutions. Second, there was evidence that decentralised reorganisation was instituting new forms of corporate governance and overcoming the regulatory deficit. The prolonged

post-soviet recession prompted governments to re-intervene in the economy and encourage the mobilisation of civil society and in particular entrepreneurship. States placed emphasis on the development of small and medium sized enterprises via the establishment of local enterprise agencies (encouraged by financial support from the EU PHARE programme; see Gowan 1992, 1995) to foster the development of a middle class. This was based on evidence that 'institutional thickness' at the regional level was required in order to promote the conditions for regional restructuring (see Hausner *et al.*, 1995). Also, the slow down in inward investment and domestic fears about external control resulted in new forms of privatisation (distribution, worker-management buyouts) designed to increase the number of domestic owners. As a result states began to plan a more proactive role in forming industrial policy and restructuring enterprises prior to privatisation (Nielsen 1995).

Second, the disintegration of the soviet system led to an increased emphasis on expanded and reformed informal networks (Szako and Sik 1993). Whilst in some places these networks were insulated and unable to permit collective strategic action (see above) elsewhere they gradually became institutionalised, assisted by more negotiated paths of transformation, but they crucially retained their loose ties and hence flexibility. In particular decentralised reorganisation led to the combination of state and private property relations, recombinant property (see Stark 1993, 1995), which broke down the distinction between hierarchy and market. This led to the development of new forms of governance between state and market and the regionalisation of production systems and raised the prospect, for some, of the

development of 'flexible specialisation' as a path for regional development (see Neumann 1992, 1993, Murray 1992, Bianchi 1992).

In addition the establishment of new types of organisational forms, such as recombinant property, increased the diversity of institutions. This overcame one of the major problems inherent in the soviet system, namely the uniformity of organisational forms, which had been perpetuated by the foreign investment attracted to the region. For some the increase in the pool of organisational forms was likely to result in competition not only between individual enterprises but also between different ways of governing production, facilitating evolutionary change. In this way a region would develop the capacity of dynamic adaptability and embedded capitalist regional development (see Grabher 1994b, 1995).

3.4 Conclusions

The complexity of post-soviet transformations in east and central Europe did not illustrate the simplistic notion of a 'transition to capitalism'. Neo-liberal policies served to intensify a regulatory deficit bequeathed by the soviet system. Moreover, the neo-liberal agenda curtailed a regulatory search process which prevented the generation of the conditions that would resolve the post-systemic crisis. It suceeded in integrating ECE with the global economy but did so through peripheralisation, in which access to the global market for individual enteprises and regions was through western European production systems. Also it deprived governments of the opportunity to actively assist industrial modernisation and regional restructuring. The result was extreme uneven development coupled with social fragmentation, as

exclusionary modes of socio-economic action prevailed which threatened social and international political stability. This made self-sustaining development more difficult to achieve. Nevertheless, there was evidence that more decentralised transformation paths could assist in the development of embedded capitalism through permitting regional agency. Without such a course of action transformation seemed destined to paint capitalism over the cracks of a systemic crisis.

Part II

The transformation of the Hungarian and East German automotive industries

Part II The transformation of the Hungarian and East German automotive industries

There was no better symbol of the failure of the soviet system than the Trabant, a small, ubiquitous, heavily polluting vehicle that was ridiculed all over east and central Europe. In *samizdat* circles and beyond, it was a *'leitmotif* for a system which oversaw the regression of half of Europe's human and material resources. Thus the substitution of Trabant production by the assembly of the VW Golf in April 1991 symbolised for many the end of communist stagnation and the birth of capitalist imagination and prosperity. But underneath the facade, the change in production also belied the popular supposed simplicity of the transition to capitalism. For the decision to end Trabant production was overlain by a complex web of contradictory strategies embedded in networks of unevenly transforming social relations.

However, the story of the Trabant better symbolised the dynamics of East Germany's transformation than anywhere else in ECE. Thus the effective closure of the hierarchical state-owned automotive industry there and its replacement by West German producers, reflected East Germany's highly statist path of extrication from the soviet system which involved the destruction of its socio-economic formation (including the state) and the imposition of alien structures. However, even in the former GDR, where the course of events was imposed and so abrupt, transformation was necessarily not predetermined, was uneven, contradictory and partial. This was more obviously true in the transformation in Hungary where the state-owned, but more market co-ordinated, industry slowly adapted to the market system and was joined by foreign owned producers integrated into pan-European production networks.

This reflected Hungary's relatively negotiated and more gradual transformation, the high level of continuity in its path of extrication, and the maintenance of parallel structures.

The transformation of the auto industry in both countries comprised the reorganisation of state owned producers and the inflow of foreign capital as the regulation, governance and social relations of production were reconstituted. There were three outcomes of transformation: the adoption of capitalist mechanisms of production and economic integration; the maintenance, to differing extents, of quasi-planning mechanisms of production and integration; and the marginalisation and termination of production. The following three chapters examine the transformation of one significant industry in two places from three different positions. First, the evolutionary negotiated transformation of the regulation and governance of production in Hungary is contrasted with the revolutionary statist approach employed in eastern Germany (chapter 4). Second, the increasing significance of market forms of co-ordination in coexistence with the remains of bureaucratic forms is considered in the transformation of production (chapter 5). In the final chapter of part two the establishment of capitalist and the maintenance of non-capitalist social relations of production, are considered in the transformation of work. In doing so six case studies are introduced: two assembly-plant case studies, Suzuki in Hungary and VW in east Germany, which were closely connected to the state and aimed to establish regionally integrated production systems using innovative production techniques; two large components factories, Ford in Hungary and GKN in east Germany; and two important

indigenous enterprises, IKARUS in Hungary and SAW (the former Trabant producer) in east Germany.

Chapter 4 Transforming regulation and governance: creating capitalist production, consumption and reproduction in the automotive industry in Hungary and eastern Germany

4.1 Introduction: replacing hierarchies with markets

The first element in the transformation of the automotive industry concerned the restructuring, from above and from below, of regulation and governance structures. The course of transformation reflected significant differences in the organisation of state owned automotive industries. Although both country's planning systems were dominated by hierarchical structures there were differences. In Hungary after 1968 industry was, in part, increasingly self-organised and regulated by a combination of quasi-market forms of co-ordination and bureaucratic regulation. In contrast hierarchical forms of co-ordination became increasingly significant in the GDR (see for instance Grabher 1995).

The Hungarian planned automotive industry was undermined by state-led initiatives which decentralised economic decision making and served to highlight the system's problems by permitting the articulation of divergent enterprise interests. In consequence the planning system gradually unwound. In contrast the more hierarchical industry in the GDR offered no scope for the expression of differing interests. As a result the collapse of the system was far more precipitous than in Hungary. In the course of the late 1980s and early 1990s in Hungary transformation accelerated but whilst partially statist, remained *relatively* negotiated and gradual because of the legacy of decentralisation. However, in the GDR, West Germany

stepped into the breach and led a *highly* statist and rapid course of transformation again because of the legacy of a lack of decentralisation.

This chapter examines and compares the relatively negotiated restructuring of governance and regulation structures in Hungary with the revolutionary and more statist course of events in the GDR. The chapter first considers the legacies of the planned automotive industries in both countries. It then goes on to examine three types of regulatory and governance changes. First, it explores the dissolution of the plan and the casting adrift of individual enterprises, the privatisation (or lack of it) of ownership and the changing relationship with the state as industrial *planning* was turned into industrial *policy*. Second, the chapter considers the creation of a market for cars as the state's monopoly in car retailing was terminated. Third, the disintegration and reestablishment of industrial relations relations systems in Hungary and eastern Germany and the responses by the two most important unions in the industry, VASAS in Hungary and IGM in eastern Germany, are investigated.

4.2 The soviet automotive industry in Hungary and the GDR

The automotive industries in Hungary and the GDR developed according to the soviet industrial model (see Chapter 3). The late 1940s and early 1950s saw the attempted replication of the soviet version of 'the scientific organisation of work'. This was an allegedly non-ideological work organisation whose origins lay in Taylorism and represented a crude attempt to create a soviet version of Fordism (see Kössler and Muchie 1990; Murray *et al.* 1990). The industry was regulated by the state plan which sought to determine the entire development of the branch and the state enterprises

which belonged to it. Central to the soviet auto industry was the attempt to mimic capitalist industry. Planners tried to establish a Taylorist labour process involving the separation of the conception and execution of work which depended on deriving economies of scale from the mass production of standardised products. To permit this and to facilitate plan co-ordination, production was concentrated in a few large state owned enterprises. Production in these enterprises was very highly vertically integrated as the vast majority of components were manufactured in-house.

In both countries the enterprises were organised according to the principles of the soviet system (see Clarke *et al.*, 1993, 10-13). The purpose of the enterprises was not to valorise capital but to reproduce the labour collective (the employees and their families). Thus many economic transactions were non-monetary and those that were - such as wages - represented the transfer of money from one account to another within central state budgets. The enterprises were thus not subject to the law of value and were not required to produce nor accumulate surplus *value.* Wages and prices were thus not related to the costs of the production process but rather the ability (or otherwise) of state authorities to alter the weight of products in barter exchanges. Thus the plan did not operate as a surrogate law of value based on calculations of necessary labour-time for production but rather as a competition for scarce resources based on political weight and political priorities.

Both industries were centrally controlled by the state, albeit to varying degrees, regulated by the plan, had guaranteed markets and exhibited the features which dogged the state's system of resource allocation. However, the sectors also

differed in some important ways. First, the Hungarian industry was integrated into an international vehicle production system oriented to meet the needs of the CMEA (which in practice meant the Soviet Union) and was able to use its bargaining power within this production system to win access to hard currency to purchase western technology. By contrast the East German industry was isolated from the rest of the CMEA and was entirely nationally regulated. Second, the industries were organised in different ways. State enterprises in Hungary were less state directed and more independent from the state plan, particularly after the economic reforms of 1968, than was the case with the industry in east Germany which was highly integrated and centralised into a huge industrial *Kombinate*. Thirdly, the industrial organisation also differed and this had quite different regional impacts in the two countries. In Hungary, owing to labour shortages, auto industry state enterprises were organised according to a simplified 'branch plant' model in which newer plants were located in rural areas some distance from the centres of engineering where the headquarters plants were located. In East Germany the industry was more vertically integrated and located in the traditional industrial heartland of Saxony and Thuringia.

Hungary

Little emphasis was placed on the automotive industry in Hungary until the mid-1960s when the country became a key player in the CMEA vehicle development programme (see Kapitány 1992, 1993). As part of the international plan Hungary specialised in the production of buses and automotive components which were exported in return for importing completed cars from other CMEA members. The industry was dominated by three very large firms which together constituted the bus

vehicle production system. Bus chassis were supplied by Csepel Auto from its plant in Budapest and delivered to IKARUS plants in Budapest and Szekésféhevár where the bodies were pressed and assembled. The buses were powered by diesel engines produced under a MAN licence by RABA in Györ. Together the production system produced up to 14,000 buses per year of which 80pc were exported - some 90pc of which went to satisfy the Soviet Union market - amounting to up to 15pc of the country's entire exports denominated in the rouble. In addition, RABA and Csepel also produced up to 1,800 heavy duty trucks mostly for the Siberian oil industry. Of these enterprises only RABA succeeded in tapping into western markets, supplying rear axles to Eaton and Rockwell of the US.

Hungary's partial adherence to the soviet model of industrial development resulted in a bus production system in Hungary which was not as highly vertically integrated - 80pc of the value of the bus was outsourced - as in other CMEA countries. As a result a supply base developed of some 50 major suppliers which were often very dependent on IKARUS but which were legally independent from vehicle assemblers. Others were almost entirely dependent on and tied to IKARUS, such as IMAG (based in Mór), which produced 500,000 seats for IKARUS and was thus one of Europe's largest seat manufacturers. However, despite this, the bus production system was rigorously regulated by the CMEA plan. The plan was based on the outcome of an annual bargaining procedure between the Soviet and Hungarian state authorities. Every December a summit between Foreign Trade officials from Moscow and Budapest negotiated a commodity exchange agreement which permitted the barter of buses for oil, gas and finished automobiles. Following the agreement in January of

each year the enterprises were informed of the annual prōduction target. Suppliers were then in competition to secure the materials necessary to meet the planned target. The annual competition for resources was governed not by the law of value nor the plan but rather by informal networks between ministries, enterprise directors and trade officials. One consequence was the poor allocation of resources as indicated by inventory turnover time of 67 days in 1989 compared to an average of just 3 to 7 days in the west (Mattheisen 1991).

As the planning system began to show signs of weakness in the 1980s Hungary's privileged position was undermined. The Soviet Union (the customer) squeezed its partners in the CMEA system. As a result the barter value attributed to the export of buses declined (see Table 4.1). As the 'value' of the product was negotiated centrally by governments and without reference to either the cost of production or customer demand, additional development or engineering of a product was not necessary since there was not a direct relationship with the customer, who in any case could not pay a higher price. Therefore, there was little incentive to innovation in production processes or product development.

In contrast to other CMEA countries Hungary's industrial enterprises were relatively independent - at least from each other if not the Ministry of Industry - and were not organised into huge industrial combinations. That created an industrial structure which included a large number of engineering firms which were independent from any one vehicle assembler and were thus suited to take part in the CMEA's international plan. Thus a number of existing diversified engineering enterprises were

included in the plan supplying automobile components as part of the production, under license, of Fiat models in Poland, the Soviet Union and later Yugoslavia. This involved a number of diversified state owned enterprises, such as Tungsram (lighting), MMG (dashboards), Bakony (electrical parts) and Elzett (locks), producing components in addition to their main activities.

Similar to the bus production system the component industry depended on foreign trade agreements negotiated centrally. The 'price' of the parts depended on their value not in terms of money transfer but their barter value in respect to finished cars. As the priority given to the production of automobiles in CMEA and the strategic significance of Hungarian producers within the industry increased, Hungarian producers won access to scarce resources and in particular were able to use hard currency to purchase foreign components and production licences. In time the general malaise in the soviet system resulted in the limitation of hard currency available to purchase components and technology from abroad - in 1987 the average age of the machinery stock in the industrial sector was 10.6 years (Mattheisen 1991) - and later limited the amount of money customers could pay for the kits of components produced by Hungarian firms. Thus production costs increased, sometimes because of the need to import components and technology from the west with hard currency, disproportionately greater than the prices that states were prepared or were able to pay. In consequence production, itself, became an loss making activity. To alleviate this situation, Bakony, for example, received a subsidy from the Hungarian government worth 283m HUF in 1989. The terms of trade turned against Hungary as suppliers had to export below cost more and more kits of components to permit

Hungary to import finished automobiles, and the state had to step in to support its producers. Once the major customer, VAZ, could not afford to pay sufficient to cover the costs of production, the Hungarian state paid the difference between the price and the cost. In effect this meant that the Hungarian state subsidised the production of cars elsewhere in CMEA since VAZ in particular could not afford the price of products produced in Hungary.

By the beginning of the 1980s the automotive industry was one of Hungary's most significant industries employing in excess of 100,000 workers and contributing heavily to the country's exports. However, even by that time the industry was beginning to exhibit the features of the crisis which ultimately led to the down fall of the soviet system in ECE - the failure to transform the economy from an extensive to an intensive one. The Hungarian auto industry was saddled with low productivity and suffered from an absence of incentives to innovate (see ECHO 1989; Kapitány and Kállay 1991).

In this context, increasingly, the CMEA system was seen by the Hungarian state as a barrier to rather than a force for industrial development and as a result some larger companies were encouraged to export to the west. In the case of RABA this involved the establishment of an additional plant on the same site to produce rear axles; the existing plant was governed by the logic of the plan and produced low quality but robust axles for the Soviet Union and the new facility produced highly engineered products for western customers. This showed that the limitation of the industry's performance owed little to competence and much to the regulation of

industrial activity by the plan. The 'plan fetishism' (Burawoy 1985) resulting in poor co-ordination prevented Hungarian producers from winning more than token market shares in western markets: in 1988 little more than USD 53 millions worth of automotive products were exported to the west (Vienna Institute for Comparative Economic Studies 1990). Other attempts to reduce dependence on the CMEA plan led the authorities to enter into negotiations with Toyota and later Suzuki, to establish car manufacturing in the country.

Just as Hungary began to look in directions other than the plan to sustain its industry, so too the interests of other CMEA member states began to diverge; under the pressure of economic stagnation, governments began to encourage the domestic production of components which severely undermined Hungarian producers. Thus during the 1980s the industry's problems intensified as exports to other east and central European states fell below the 1980 level while trade with the west barely increased. Production of buses peaked in 1984 at 14,341 but subsequently fell by nearly 14pc by 1988 (see Table 4.2). Investment in the industry also fell as obsolete and fully depreciated machinery was not replaced. Given the extensive organisation of the industry the most disturbing measure of the industry's problems was the reduction in the workforce from 104,000 in 1980 to 63,700 in 1990 (see Ministry of Industry and Trade 1991a; see also Table 4.3).

East Germany

In contrast to Hungary the newly formed East German state inherited a modern automotive industry. Some 25pc of pre-war German car capacity fell within the borders of the new state including facilities which belonged to firms which later became known as Audi and BMW. The industry was very highly regionally concentrated around two towns (Zwickau and Eisenach) in the southern Länder of Saxony and Thuringia and was organised along craft production principles. After the creation of the East German state, planners were sent in to restructure the industry in the mould of the soviet industrial model. Thus disparate craft workshops were integrated in an attempt to introduce mass production techniques by deepening the division of labour.

The first industrial governance model comprised confederations of state owned firms which were attached to industry ministries. However as planning did not follow the logic of the production process (suppliers were usually attached to a different ministry from that of the final producers) the co-ordination of sectors and integration of firms were poor. The failure of the planners to enforce their aims resulted in further centralisation of the industry in the late 1960s but this time organised along sectoral lines (see Voskamp and Wittke 1991; Grabher 1994a). The entire automotive industry was restructured and came under the control of the *Industrie-Fahrzeug-Anlagen-Kombinate (IFA-Kombinate),* a holding company which encompassed the entire road vehicle production industry in the country (see Kowalski 1992). It was headquartered in Berlin and comprised 62 state owned enterprises producing components and another nine firms for final assembly employing 130,000

workers and employees. The *IFA-Kombinate* consisted of three subsidiaries. The car manufacturing system formed the *IFA-Personenkraftwagen (IFA-PKW)* which was headquartered in Karl-Marx-Stadt (Saxony) (see von Schleinitz 1993). The two further organisations formed the commercial vehicle and motorcycle production systems respectively[1].

IFA-PKW was responsible for planning, co-ordinating and managing the production schedules and logistics of the automobile production system comprising 29 component and three assembly facilities employing at its peak some 65,000 workers and employees. The two largest assembly plants were *VEB-Sachsenring Automobile Werk (SAW)* located in Zwickau (Saxony) employing 11,700 workers producing the Trabant and *VEB-Automobile Werk Eisenach (AWE)* producing the Wartburg in Eisenach (Thuringia) employing 9,300.[2] The significance of the car production system *(IFA-PKW)* was indicated by the fact that its turnover of 10.8 billion Ostmarks represented some 5pc of the GDR's entire national income.

The result was a centralised, highly vertically integrated 'mass' production system concentrated in Saxony and Thuringia in which no two enterprises were meant to replicate production. In reality the production system continued not to work in an effective manner. The central administrators attempted to impose production schedules but the lack of competition in the supply chain rendered them

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[1] The CV production system was concentrated in *IFA-Nutzkraftwagen (IFA-NKW)* and comprised 26 firms employing 50,000 workers and employees. The motor cycle production system consisted of seven firms employing 15,000 people.

[2] In addition to SAW and AWE there was an assembly facility in Karl-Marx-Stadt (Saxony) producing Barkas vans employing 7,300 workers and employees.

unenforceable; political patronage would not suffice. As was the case in much of ECE such economic co-ordination as existed resulted from informal forms of collective action that took place behind the facade of the planning institutions (see Heidenreich 1992). The unreliability of suppliers and the frequent need for assemblers to re-engineer parts meant that vehicle assemblers were dependent on component producers. As Rudolf Leichsenring, the purchasing director of *Sachsenring Automobilwerk* (SAW) (the producer of the Trabant) put it: *'Die Zulieferer waren die Konige, wir die Bettler'* (The suppliers were the king, we the beggars) (quoted in Jageler 1990; see also Kowalski 1992, Kaden 1990)

The soviet industrial model and the unreliable supply chain (resulting from the plan's inability satisfactorily to co-ordinate the social and technical division of labour) resulted in a very high level of vertical integration - with some 80pc of the Trabant being produced by SAW - compared to the average of 50pc in West Germany. Nevertheless there existed a supplier sector comprising 29 outdated inefficient firms employing 37,000 workers. In addition as vehicle models became more sophisticated, for example in utilising more electronic components, the assemblers became reliant on sourcing components from other Kombinate for whom such production was peripheral to their main business. This merely served to underline the inadequacy of the system's ability to co-ordinate the production of complex manufactured products.

Thus despite central control, the volume of production in SAW, the larger of the two main automobile assembly plants, did not exceed 140,000 units, somewhat less than that considered to be a minimum efficient scale in western mass production

plants (see Jückstock 1990). The organisation of an industry in which competition was an anathema and research and development functions were centralised, failed to generate the conditions necessary for innovation and development. In addition, the absence of market mechanisms and signals to translate demand into supply and the existence of captive markets meant there was no demand-led incentive for producers to develop their products and production processes (see Lungwitz 1991, Lungwitz and Kreißig 1992). These structural problems created a general malaise in the industry which was symbolised by its two main products. Both the Trabant (which entered production at Zwickau in 1955) and the slightly more modern Wartburg (produced at Eisenach) owed much of their design to 1930s technology and were powered by two-stroke engines produced at Karl-Marx-Stadt. The economy's technological capacity failed to keep pace with the west because of the nature of the system, government priorities and international controls on the transfer of technology to the east bloc. Thus in spite of indicative state planning the volume of production failed to keep pace with western levels, peaking at only 218,000 units in 1986. Regulatory mechanisms failed to alleviate poor co-ordination and integration in the sector reinforcing the inability of the system to transform itself from an extensive to an intensive mode of production (see Table 4.4).

In contrast to Hungary, the East German automotive industry was highly centralised at the national level but was not integrated with other CMEA partners. East Germany was excluded from the CMEA international car production system which was associated with the co-ordinated purchase of Fiat technology in the mid-1960s. This was due to the political regime's ideological position against

personalised private transport and the inability of the sector to earn hard currency which would have made considerable levels of investment worthwhile. For these reasons the state did not permit enterprises to enter into any major licensing agreements with western firms.

By the middle of the 1980s the automobile industry had ceased to develop further. Burdened by debt and obsolete products, and starved of investment, the industry had fallen behind other east European producers and even further behind those in the west. Labour productivity was very low, believed to be around 30pc of the level in West Germany. Approximately 12 cars were produced per worker per year by SAW in 1985 (as 12,000 workers produced 140,000 units). Indicative of the stagnation of GDR auto sector was its falling contribution to total east European automobile production: whereas in 1965 the GDR had produced 23pc of the total, by 1985 this had fallen to only 9pc (see Swain 1992a). Despite this car production had increased from 7,000 in 1950 to 218,000 in 1986 and the GDR was the second largest CMEA car producer after the USSR. When the size of the two countries is taken into account the volume of production per 10,000 of the population was 131 in East Germany and only 44 in the USSR in 1988. Therefore in crude arithmetic terms the planned car industry had succeeded; car ownership density was 199 per 1,000 population in 1985, considerably higher than in some other CMEA countries and also in some parts of west Europe (such as Spain, Greece and Portugal) but compared poorly with a figure of 424 in West Germany (see Table 4.5; Swain 1992a). By 1989 ownership had increased further with some 54 households out of 100 owning a vehicle, but the production system remained unable to satisfy demand as individuals

savings increased. Thus despite the lack of affection toward the car models, waiting times for a Trabant were in excess of 15 years.

As the 1980s proceeded the leadership became concerned that the industry was falling too far behind its counterparts in other CMEA countries and that the imbalance in demand and supply might prompt social unrest. This resulted in efforts to reinvigorate the sector. The first plans involved the production of a new car in conjunction with Czechoslovakia, however, as anticipated costs rose to 7 billion Ostmarks, the project was dropped. With the failure of this option the East German regime looked to the west to satisfy its need to modernise the industry without crippling an already struggling economy. In 1984 an accord was reached with VW. This paved the way for the production, beginning in 1988, of 1050 cc Polo engines at Karl-Marx-Stadt. In order to pay for the modernisation a portion of the production was to be exported to VW in West Germany whilst the remainder was to be used to power versions of the Trabant and Wartburg. The exportation of other automobile components to western Europe was initiated to generate further hard currency.

Part of the investment, anticipated initially to be 4 billion Ostmarks but which rose to 10 billion, involved the construction of a small new assembly plant at Mosel, just north of Zwickau, and a new engine facility at Karl-Marx-Stadt. In addition, some suppliers had access to resources to re-engineer parts for the modernised models. Nevertheless, the distribution of the investment for new plant followed a rationale more in keeping with the need for political patronage than a genuine industrial strategy (see Lungwitz 1991). These attempts at modernisation, however, were

quickly over taken by subsequent developments in the country and elsewhere in east and central Europe.

4.3 State policies towards the automotive industry in Hungary and eastern Germany

In the course of the break up of the soviet regimes in Hungary and the GDR the co-ordinating mechanism of the economy was transformed from a more-or-less plan or hierarchical system to a more-or-less market or horizontal one. This occurred in two ways: first, through change from below as the institutions and actors that comprised the soviet system failed to respond to traditional forms of co-ordination (the plan); and second, through change from above as state authorities reformed the co-ordinating mechanism in the face of stagnation. In the remainder of this chapter we consider the three ways in which these bottom-up and top-down changes resulted in Hungary and the GDR abandoning the planning system and establishing the foundations for the new forms of regulation and governance of the automotive industry. First, we examine the privatisation of the industry and the state's industrial policy. Second, the chapter considers the creation of a market for passenger cars. Thirdly, we examine the role of civil society and the state in establishing the core principles behind new forms of interest representation and industrial relations systems. This is followed by a discussion of the restructuring of trade unionism in the automotive sector.

4.3.1 Privatisation

The differing course of privatisation in the two countries reflected the differences in their planning systems (see Grabher 1995). The major difference in the two systems was that whereas after 1968 centralised planned control in Hungary was replaced by a more decentralised system of bureaucratic regulation, in the GDR the state sought to overcome lack of co-ordination by increasing hierarchical control. Thus the economies in the two countries operated quite differently from each other and presented quite different legacies. As a result privatisation in Hungary was gradual and relatively decentralised compared to the former GDR where economic reorganisation was highly centralised and statist.

Hungary

Privatisation in Hungary can be divided into three phases. The first phase began in earnest in 1987, but was the culmination of the soviet-backed regime's attempts to liberalise the economy after 1982, when state owned enterprises were permitted to reorganise themselves by forming subsidiary companies limited by shares. The result was in fact the creation of nominally private firms owned by state owned holding companies. Where such reorganisation was pursued rigorously, state owned enterprises became 'hollowed out' shells co-ordinating numerous satellite firms limited by shares (limited liability companies or KFTs) (see Burawoy 1992, Stark 1993). Such a course of development did not represent genuine privatisation but 'etatization' and the creation of 'recombinant property' as the distinction between private and state owned property forms was blurred (see Stark 1993). This period of 'spontaneous privatisation' (Stark 1990) was enterprise-led with the state authorities

having no powers to regulate or control a process which generated resentment as individuals, via enterprise councils, swapped administrative-political power for economic power by taking control of formerly state assets in the form of so-called 'nomenklatura buyouts' (see Stark 1990). A degree of statutory regulation of the process was introduced with the passing of the Law on Business Association (1989) which governed the creation of limited liability companies and joint stock companies (Rts). Thus change from below had begun to force the state to introduce new forms of control over economic institutions.

The second phase of involved 'controlled privatisation' as the state took over the entire process with the establishment in 1990 of the State Property Agency (SPA) and later, in 1992, the State Holding Company (ÁV Rt). The phase of controlled privatisation was regulated by the Law on Transformation (1989 and subsequent amendments) which governed the actual transformation of state owned enterprises. This involved two stages: first, the pre-privatisation process of transforming state owned enterprises into KFTs and Rts by means of 'corporatization' in which shares were deposited with the state and public authorities and second, privatisation itself, the sale of the shares to private investors. With the establishment of the SPA the symbolic ownership of around 2,000 state owned enterprises was transferred from enterprise councils to the SPA whose responsibility it was to corporatize and privatise the enterprises. The role assigned to the SPA meant that the state, led by the first post-communist government, re-took control over the economy (undoing the last years of the soviet regime's devolution of economic control). Some likened this process of privatisation to the 'renationalisation' of the economy (Voszka 1994). The

formation of the SPA also signalled the beginning of a period of dependence on foreign capital to privatise state property given the absence of domestic capital.

Following the creation of the SPA, the various means of privatisation were brought under control (see, for instance, SPA/SHC 1994, Bridger 1993). Enterprise-initiated privatisation, involving state owned firms attempting to attract strategic (invariably foreign) investors, continued but was brought under the regulatory control of the SPA in the form of the Self-Privatisation Programme. Likewise the SPA took over the responsibility for processing unsolicited bids for state property by foreign companies. In addition, the SPA began a new privatisation method which involved selling groups of companies. The first tranche of twenty companies was put up for sale in the First Privatisation Programme (FPP) in September 1990. However by the end of 1991 the sale of only three companies had begun. In that year the Second Privatisation Programme (SPP) was announced involving 23 enterprises. None of them attracted investors. A major problem was the lack of domestic capital which led to the Existence Credit scheme which permitted Hungarians (individuals or companies) to apply for soft-loans to purchase state owned property. Even so the company initiated privatisation programme involving strategic foreign investors remained the most important method of sale. However, foreign interest was confined to relatively few sectors of the economy including in particular cigarettes and the food and drink sector. In 1991 85pc of the SPA's sales were to foreign buyers and this declined only slightly to 60pc in 1992. As a result the bulk of the engineering sector, including the automotive sector, was not privatised, largely because of an absence of foreign interest, which resulted in the Ministry of Industry

and Trade arguing for new methods of privatisation (MIT 1992). Despite this the MIT continued to regard the attraction of strategic foreign investors as the only way of ensuring the survival of state owned industrial enterprises. At the same time the Pre-Privatisation Programme was introduced to permit domestic investors to purchase small service enterprises.

Amid western criticism that Hungary's privatisation process was proceeding slowly and domestic criticism that it was over dependent on foreign investors and did not provide sufficient opportunities for domestic investors to become involved, the state embarked on the third phase. To accelerate privatisation, the state introduced 'simplified privatisation' or the Self-Privatisation Programme in which the SPA established a tranche of approved consultancies which were permitted to privatise smaller enterprises without reference to the SPA. In addition, responding to domestic political pressure, the state introduced a number of schemes designed to allay fears of overdependence on foreign investors. In early 1993 the state established the State Holding Company (ÁV Rt.) and transferred the ownership of 162 state owned enterprises which were considered to be of strategic importance to the national economy. Whereas the SPA was responsible solely for privatisation, ÁV was established to develop long term corporate strategies for firms where the state wished to remain the majority owner[3].

At the same time there was renewed interest in Employee Stock Ownership Programmes (ESOPs) in which employers could be 'given' 10pc of an enterprise's

[3] Following the victory of the Socialist Party in the 1994 elections the new government indicated its intention to merge the SPA and ÁV and reduce the number of 'strategic' companies to just 46.

equity and purchase additional equity at up to 50pc of its face value. In 1993 there were 122 ESOPs making it the most important privatisation method. In practice ESOPs were used to privatise enterprises - mostly in the industrial sector - which had failed to attract strategic foreign investors. In addition there were two privatisation methods designed to create a class of Hungarian owners. The first permitted Hungarians to lease firms from the SPA with a view to eventual privatisation and pay back the cost of the fee from pre-tax profits. The second involved the distribution of compensation notes to former owners of property which had been confiscated by the soviet regime. These notes could be exchanged for shares in selected state owned companies that were floated on the stock exchange. As a result of these new forms of privatisation, for the first time in 1993 the majority of privatisation proceeds were generated from domestic investors even if virtually all of it had been borrowed from the state.

Following their election to become the first post-communist government, the Hungarian Democratic Forum (HDF) aimed to privatise 50pc of state owned property by the end of 1994. However by May 1994 the SPA had completely sold 538 companies, sold minority stakes in a further 41 and majority stakes in 166 enterprises. This meant that there were 481 state owned enterprises which had been transformed into corporations but remained entirely state owned (SPA 1994). Out of the 1,848 state owned enterprises that were assigned to the SPA some 431 had been liquidated by May 1994[4]. In effect liquidation also represented the privatisation of economic organisations as a large number of liquidated enterprises were in some form or other

[4] A further 44 economic organisations were liquidated by the SPA following corporatization.

sold to investors. In total the privatisation programmes generated HUF 118bn[5] of which HUF 13 bn was reinvested in restructuring SPA owned enterprises. In addition there were 9,661 small businesses, mostly in the service sector, which had also been privatised. However, by the end of 1993 the proportion of state property that was estimated to have been privatised was between 18 and 20pc (cited in Stark 1993).

Responsibility for the privatisation of the automotive industry was assigned to the State Property Agency. However, owing to a non-sectoral organisation and because the state owned automotive component enterprises resembled 'mini-conglomerates' operating in a wide variety of sectors including the automotive industry, responsibility for the privatisation of firms involved in the automotive industry was dispersed amongst different departments. As a result it was difficult to assess the privatisation of the sector in general terms. However, the privatisation (or rather the lack of it) of two of the most important auto component producers, MMG and Bakony, indicated the problems the state had in attempting to privatise the industry.

Both companies, each employing around 4,000 at their peak, were important members of the CMEA international vehicle programme supplying dashboard instrumentation (MMG) and electrical components such as windscreen wiper motors (Bakony) to a number of assemblers in eastern Europe. However, both also had considerable interests outside of the automotive industry (equipment for the Soviet oil

[5] Including cash and non cash revenues.

industry and the defence industry respectively). Both MMG and Bakony were corporatized by the SPA which with management sought to identify strategic foreign partners that could supply new markets. However, the SPA and the respective management in the two firms disagreed over whether the firms should be divided up and sold or privatised as single entities. In both cases, although some peripheral 'branch plants' were sold and intra-corporate trade was marketised, the management view prevailed and the enterprises were not broken up. In 1992 the SPA put out a tender for potential buyers for MMG but by the time of the submission date in June of that year no bids had been received. After a further year of seeking a strategic investor and considering an MBO in early 1994 privatisation by ESOP was initiated. Bakony also had considerable problems. Having been transformed into a company limited by shares (owned by the state) by mid-1992 it failed to attract a strategic foreign partner to invest in the whole firm.[6]

Both MMG and Bakony were typical of the sector as a whole. Although in most cases joint ventures were established with foreign firms as part-owned subsidiaries, the sale of core enterprise, to either foreign or domestic private investors, was very limited. As a result the sector continued to be bypassed by foreign investors which established green field investments (see chapter 5) instead of acquiring existing producers. In consequence privatisation of the sector became dependent on initiating ESOPs.

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[6] A number of bids had been made by foreign firms for parts of the company but these had been rejected because of the management wish to keep the firm together. In addition there were prolonged negotiations between GM and Bakony to set up a joint venture but the US company withdrew.

Following the establishment of ÁV Rt at the end of 1992, the ownership and responsibility for the partial privatisation of IKARUS and RABA were transferred from the SPA. This signalled the government's decision to consider these two enterprises, believed to support in excess of 1,000 domestic suppliers, as of 'strategic' importance to the national economy and which were therefore to remain under partial state ownership in the long term. It also recognised that considerable restructuring was required before even partial privatisation could be considered. It was envisaged that the state's involvement in the two enterprises would be confined to an equity share of either 25pc or 50pc plus one 'golden share' giving the state a potential veto over future development of the firms. As a result ÁV took steps to reduce the state's equity in the companies but with some difficulty with the result that an offering to sell some 5.9pc of IKARUS remained unsubscribed. At the beginning of 1994 ÁV's stake in IKARUS stood at nearly 64pc and in RABA at 41pc[7]. The third major state owned automotive company, Csepel Auto, was put in liquidation in 1992 and the state sought a buyer for 'empty' assets (without liabilities).

Eastern Germany

The process of privatisation was very different in the former GDR than was the case in Hungary. Whereas the Hungarian authorities pursued a 'gradualist' strategy, in the course of German unification, as the West German state gained the ascendancy, 'shock therapy' was applied. However, it was significant that in following such a course the West German state harnessed and exercised the institutional capacity of the old soviet backed regime for its privatisation effort. In

[7] A further 51pc of RABA was owned by the state owned Hungarian Investment and Development Bank Rt. following a debt rescheduling agreement.

consequence the method of privatisation was 'top down', bureaucratic, planned, goal-orientated, centralised and as such mimicked the GDR planning system (see Seibel 1994, Grabher 1995).

In March 1990, just a few days before the first free elections the SED government established the Treuhandanstalt (THA) to administer and preserve state owned property. However, as moves towards unification moved rapidly, and the Trust Law of June 1990 was passed, the legal basis of the THA was altered and ownership of state property was transferred from 'the people' to the THA which was empowered to privatise and reorganise (with a view to sale) East German state property as quickly as possible. This role assigned to the THA, and its organisation, was subsequently included in the Unification Treaty. Thus unification resulted in the THA being transformed from an administrator and manager of state owned property into an owner and privatiser (Drobnig 1992). At the same time the majority of the existing directors were replaced by west Germans; ultimately the board of directors became entirely composed of west Germans. The THA thus became the world's largest holding company (THA 1991), employing 4,200 employees, owning 13,781 enterprises (after some enterprises had been divided up)[8] which collectively employed four million workers, of which 75pc were in industry. Enterprises employing more than 1,500 workers were the responsibility of the THA headquarters located in the former GDR's House of Ministries. The agency was divided into eight departments, including six responsible for an industrial branch, thus mirroring the organisation of the GDR's industrial ministries (Grabher 1995). In addition there were two further

[8] The THA also owned 10,600 small retailing outlets.

important sub-departments, one (Abwicklung) responsible for liquidating enterprises and devising social plans and one to ensure that contracts with investors were adhered to. Smaller enterprises were made the responsibility of the THA's 15 regional offices. It was initially anticipated that the sale of all state property would raise DM600bn to be allocated to industrial reorganisation and the Federal budget.

Although the THA was responsible for both privatisation and job protection, as Theo Waigel, the federal economics minister at the time, pointed out, in practice privatisation was the agency's priority: 'Experience teaches that privatisation is the best form of restructuring' (*Financial Times* 3 July 1992 cited in CURDS 1993, 103). Following the passing of the Trust Law in June 1990, enterprises were given just one month to transform themselves into limited liability companies. The THA subsequently began to convert public into private property in two ways: reprivatisation to former owners and privatisation to new owners by sale. The primary means of achieving that was the sub-division of enterprises to create focused viable companies. In the first nine months of operation the THA sold 1,600 enterprises (Drobnig 1992) and by the middle of 1992 the first regional offices were closed having sold all their enterprises.

The operation of the THA can be divided into three phases. The first phase occurred between monetary union and unification when the THA sought to preserve continuity. As a result it guaranteed a DM20bn liquidity credit to allow all east German enterprises to continue in business and pay wages. The second phase began with unification, when the THA's market philosophy resulted in the rapid privatisation

of enterprises but without a strategic vision (beyond letting the market develop) for the economic development of the region. The result was the rapid deindustrialisation of the region and the generation of considerable opposition to the THA's strategy. In the year and a half following unification industrial output fell 65pc, involving the loss of 3.2 million jobs, and GDP fell by 14pc in 1990, and 30pc in 1991. In addition the THA was criticised for selling assets inappropriately, for example to property developers seeking valuable real estate, too cheaply and for allowing too much of the economy to become owned by west Germans. This led to the agreement of the 'Solidarity Pact', between the federal government, the political parties, the Länder and the trade unions, which included a commitment to preserve east Germany's 'industrial cores', even if they could not be sold to the private sector. This change of strategy signalled the third phase of the THA's activities.

Where privatisation was possible the THA began to place greater demands on potential investors and also invested in active labour market policies. One important new rule was that a sale was only permitted where there were at least two competing bids. Also, the agency placed more and more emphasis on the investment and job creation commitments of potential investors. Later however, as the THA's debt liabilities increased, the price became as significant as the buyer's guarantees. Enterprises that formed part of the 'industrial core' were identified on the basis of the so-called 'Saxony model', where the Land government, following discussions with business and trade unions, identified companies of regional importance (Bundesministerium für Wirtschaft 1993). Where an enterprise was deemed to form part of eastern Germany's 'industrial core' the THA played an important role in the

formulation of industrial development concepts[9]. This involved the creation of a new category of 'controlled enterprises', those enterprises - most of which had had portions privatised - that were directly managed by the THA. In practice, however, the majority of these 'core' companies - defined according to the local impact of closure - were subsidised in order to provide additional time for an investor to come forward; they were not given additional investment capital to facilitate significant restructuring. It did however enable the Land governments to play a more active role in protecting and developing their regional economy. As it became increasingly difficult to sell enterprises the THA become ever more proactive in restructuring firms (see below). The agency also became more willing to permit a privatisation even if it amounted to more than the cost of liquidating the enterprise - this had previously been against the rules of the THA. Some enterprises that could still not be sold were transferred to 'management companies' in which west German private holding companies were established to manage up to three THA enterprises.

To overcome charges that the THA had allowed too much of the east German economy to fall into west German ownership and had prevented the development of a locally owned *Mittelstand*[10], the THA began to place greater emphasis on management-buy-outs (MBOs). By the end of 1994, by which point the THA had closed, 2,679 MBOs had been completed. However the THA conspicuously failed to use its power to distribute shares in former state property to citizens - a measure that

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9 The most important example was the THA's refusal to sell the east German steel maker, Eko Stahl, without investors committing themselves to developing an integrated iron and steel complex.

10 The *mittelstand* is the sector of small and medium sized industrial companies that were so important in securing West Germany's post-war industrial development.

would have stimulated demand in the region and permitted former state firms rapid access to capital markets.

Where the THA considered a firm not viable it was liquidated and, where possible, the assets sold. This resulted in the creation of 'empty shells', companies owned by the THA whose assets had been sold to private investors. By the end of 1994 a total of 3,527 enterprises had been closed. These closures, and the restructuring of other enterprises, resulted in a 2 million drop, to 1.2 million, in the number of people working in manufacturing industry between 1989 and 1993. As a result the open unemployment rate peaked at 18pc but the hidden rate ranged between 30 and 35pc (including around 1million on short time working and employment training schemes) (*The Economist* 21 May1994, 10). By the end of 1994 the unemployment rate remained at 13pc. The high rate of unemployment forced the THA to become more active in the labour market and in particular to support 'employment promotion companies' (see chapter 6).

As a consequence of securing investment and job guarantees the THA was able to illustrate its success by publicising projected investment and employment levels. Thus by the end of June 1994 the THA claimed to have attracted DM 198bn and saved or created 1.46 million jobs (THA 1994). However, these figures were somewhat misleading. First, the figures included commitments made in the course of early privatisations which were not contractually enforceable. Secondly, even after the introduction of contractually enforceable guarantees, the publicised levels of investment and job creation were not enforceable. This was because in the course of

purchasing an enterprise from the THA contracts included two figures for investment and job creation. The first figures, which were publicised by the THA, referred to the level of investment and employment that the investor *hoped* to achieve. The second set of figures, which were confidential and contractually enforceable, were considerably lower and referred to the *guaranteed* investment and employment levels. In addition, the commitments were to be met over a five-year period. Although one privatisation was annulled by the THA, in practice it could only fine investors who failed to meet the commitments and only did so infrequently. As a result investment and employment secured by the THA in the new Länder was rather less than publicly claimed.

The THA was therefore responsible for the privatisation and reorganisation of the East German automotive industry (see Kreißig and Lungwitz 1993). The two car assemblers, IFA-SAW and IFA-AWE, and the truck assembler IFA-NKW, posed the agency most difficulties given the size of the subsidy the two companies required to continue operating. Following the initial period of the THA during which the west German state indicated it would permit the agency to subsidise continued vehicle assembly at the two plants, the new market-led approach resulted in a change of policy and the termination of car assembly in the new Länder. It was estimated that continued production at IFA-AWE would require a DM100m annual subsidy. As a result AWE, and later IFA-NKW, were placed in liquidation and IFA-SAW was reorganised to focus on component production (see chapters 5 and 6).

As early as 1990, the federal government, largely over the head of the THA, enticed three strategic investors, Opel, VW and Mercedes-Benz, to establish operations respectively at AWE (Eisenach), SAW (Zwickau) and NKW (Ludswigfelde). The political significance of the projects resulted in large sums of funding being made available from the federal ministry of finance to 'protect the locations'. The finance was used to allow the THA to enter into joint ventures with the three strategic investors. In all three cases, the THA took a majority stake, but not management control, in the joint venture and guaranteed to pay the losses (up to an agreed maximum). In return the investors established CKD operations and guaranteed a level of production and employment for a specific period of time, at the end of which the joint venture was to be sold or liquidated. The ventures were established to maintain production and employment whilst the three investors established wholly owned subsidiaries to construct and operate new integrated manufacturing and assembly facilities. However, the THA's competence to ensure that the investments were made by the three subsidiaries owned by Opel, VW and Mercedes-Benz, was limited. Thus the THA was unable to penalise VW when it postponed its investment because no penalties had been included in the contract. However, when Mercedes-Benz reneged on its promise to construct a new truck production facility near Berlin it was forced to return some of the subsidies that it had received.[11]

As the activities of the three strategic investors developed the THA had to negotiate the winding up of the three joint ventures. In each case the fate of the joint ventures reflected the progress of the strategic investor's original plans. Following

[11] The intial contract between Opel and the THA, signed in 1990, did not include penalties for postponing or cancelling investment but these were included in a revised agreement in 1992.

Mercedes-Benz poor performance and termination of its investment the joint venture was liquidated with the THA incurring the losses. With the postponement of VW's investment the life of the loss making joint venture was extended until 1997 when production at the new plant was due to begin. The joint venture with Opel was sold to the car manufacturer. Since it owned the new plant that was only sold to Opel in 1993 the THA received a return on its investment. The result of these dealings was that whereas the THA made large losses in its dealings with VW and Mercedes-Benz it only made a small loss with Opel, despite contributing a subsidy amounting to a greater proportion of its investment than was the case with the other two investment projects; the public subsidy amounted to 60pc of Opel's investment and 40pc of VW's (*Industriemagazin* 5 October 1990). The other GDR vehicle assembler, Multicar, located in Walterhausen (Thuringia), which produced small commercial and special vehicles was the subject of a MBO , backed by investors from western Germany, which meant it became the only automotive assembler to survive unification intact

The THA's vehicle construction unit, part of Department 4 (U4)[12], was responsible for the conversion of the automotive components sector[13]. In addition the unit was also responsible for privatising and reorganising the engine building sector, train construction, the agricultural machinery sector and later the ship building industry. Some 36 THA officials were involved in the privatisation of the auto sector[14]. In keeping with the corporate ethos of the THA the Fahrzeugbau (FB) unit

[12] Department 4 (U4) was also responsible for the privatisation of the optical instruments/equipment sector, paper manufacturing and chemicals.

[13] Initially responsibility for the auto sector was placed with Department 2 (U2) before being transferred.

[14] A high proportion of the officials worked for west German management consultancies which were contracted to work for the THA. These officials were commonly known, by THA employees, as 'one dollar men' for being regarded as selling enterprises cheaply.

operated in a goal-orientated way (officials stood to earn substantial bonuses) with the result that most information publicly released referred to their goals rather than what actually occurred.

There were 185 auto-related enterprises to be privatised when the THA was set up; at the end of 1991 75 were left to be sold to the private sector. In early 1992 tenders were sought for the sale of 43 automotive component producers, which collectively had a turnover of DM5.2bn and made losses of DM500m. Given that the auto industry had come to an effective halt in April 1991 these figures indicated the extent to which balance sheets could be manipulated. Also the public tender of the firms illustrated the public selling strategy of the unit. Not least, it was claimed that VW and Opel's emphasis on 'lean production' and just-in-time logistics (see chapter 2) meant that the overwhelming bulk of their component procurement would be from producers in the new Länder (*Guardian,* 28 March 1992). However, as the assembly plants entered production such localised development seemed increasingly unlikely. By the end of 1992 FB had sold all but 26 enterprises and had secured a projected level of 28,000 jobs. The remaining THA firms employed 14,000 workers and had a turnover of DM 608 million. In addition, there were 10 auto related enterprises which were 'controlled' by the THA. This meant that out of the 185 automotive enterprises allocated to the THA nine were 'officially' liquidated.

The ease of privatisation depended, in part, on the product profiles of the enterprises. Thus enterprises which produced products such as shock absorbers and electrical parts were the easiest to sell, whilst engine parts makers and others with

foundry capacity, such as spring and small body part manufacturers, were the hardest to find buyers for. Also following the postponement of investment by VW and the cancellation by Mercedes-Benz, the speed of privatisation slowed, and a number of agreements that were close to conclusion collapsed. As a result the department, which up to then had not encouraged their formation, began to support MBOs. Also, as the weight of political pressure increased from the Länder governments, the department began to place greater emphasis on restructuring and reorganisation prior to privatisation (see chapter 5).

4.3.2 Industrial policy

Hungary

In the first phase following the unwinding of the planning system, industrial policy was coterminous with privatisation (see MIT 1992). Thus the Ministry of Industry and Trade's overriding policy goal was to promote the privatisation of state owned enterprises in order to facilitate organisational restructuring and decentralisation. Privatisation was meant to restructure the manufacturing sector in four ways: by eliminating monopolies, decentralising economic decision making, establishing new types of economic integration, and promoting property acquisition. The ministry's policy was to transform and privatise enterprises prior to restructuring, believing that it was better for the market rather than the state to dictate change. Thus industrial policy was defined in opposition to the past experience which resulted in a neo-liberal policy environment. In any case, the state lacked the institutions and

finance to articulate a more interventionist approach even if it had wanted to pursue one.

It was anticipated that privatisation and subsequent restructuring would result in the contraction in the manufacturing sector (and particularly a reduction in the number of large firms and those involved in the engineering sector) resulting in the loss of over 200,000 jobs, as industrial employment fell from 900,000 to under 700,000 by 2000. Given the emphasis that Hungary placed on attracting DFI to provide the impetus for its privatisation programme the main instrument of industrial policy was the attraction of direct foreign investment in the form of greenfield investments and strategic foreign partners for existing producers (see MIT 1991, 1992). Hungary was the first ECE country to permit DFI with the introduction of the Foreign Investment Act XXIV in 1988. To further encourage DFI the government compiled an unrivalled bundle of investment incentives including tax holidays, preferential customs treatment, and privileged market access. As a result Hungary attracted more joint ventures and DFI than any other country in ECE. Up to the end of 1993 Hungary was the recipient of around USD 5.767 bn direct foreign investment, representing in excess of half of all investment in east and central Europe (EBRD 1995). The investment resulted in the formation of 20,000 joint ventures, although the majority were small and dormant.

As part of the policy of attracting DFI the government identified a number of sectors on which it placed particular emphasis. Given Hungary's specialisation in commercial vehicles and automotive components in the CMEA vehicle programme

(which bequeathed a legacy of an independent component sector) and following the securing of investments by Suzuki and GM in passenger vehicle assembly, the government decided to emphasise the automotive components industry. An amendment to the Foreign Investment Act XXIV (1988) was introduced in 1991 which placed the automotive industry in a preferred category qualifying investments in the sector for additional government support (see MIER 1991). As a consequence of the amendment auto-related investments were entitled to receive a five year tax 'holiday' and thereafter a 60pc tax concession until the end of the tenth year after the commencement of production. In addition the government held out the possibility of an extension to the tax concessions after the tenth year where a project was deemed as having strategic importance to the national economy. Automotive investment potentially fell into this category.

In addition various government ministries offered cash incentives designed to encourage investment co-ordinated by an Inter-Departmental Committee. Auto-related investors were disproportionately supported by cash incentives. The most important source of funding was the Ministry of International Economic Relations (MIER) Investment Promotion Fund which permitted the government to support foreign (mostly manufacturing) investments which involved in excess of HUF 50m DFI and a foreign equity share of greater than 30pc. The fund was particularly designed to contribute towards infrastructural modernisation where this was essential to the success of an investment project. Also the fund could be used to buy state participation in a venture. The government placed a ceiling on the value of support from the Investment Promotion Fund of HUF 100m or 30pc of the value of the

investment (whichever was the lowest). There was also a number of other discretionary funds which were allocated according to a competitive procedure. Domestic firms were eligible to apply for support from these funds. The Ministry of Labour administered the Employment Fund which dispersed funds to support training and job creation. The third most important source of support was the Nature and Environmental Fund which could be used to contribute to the costs of clearing up pollution. Also the Regional Development Fund assisted, largely through wage subsidies, investment in areas of high unemployment.[15] The other means of state support for DFI was a commitment to protect long term investors from the impacts of liberalising trade and markets. Thus in the automotive sector customs regulations were organised so that the major investors (Suzuki, GM and Ford) enjoyed a 23pc tariff advantage compared to vehicle importers who had not invested in local manufacturing.

As a result of these incentives Hungary was successful in attracting a significant level of automotive investment in the early 1990s (see Chapter 5). Not least one investment in particular through its close links with the government and a number of significant state owned automotive enterprises (including for example IKARUS) that by Suzuki, became an integral part of MIT's industrial policy (see chapters 5 and 6). However, the predominance of greenfield investments and the difficulty that local suppliers had in trying to become involved in such projects forced the state to alter the emphasis of its industrial strategy. DFI had failed to provide the

[15] Whereas the Investment Promotion Fund was for the exclusive benefit of foriegn investors the other funds could be applied to by foreign and domestic enterprises but were largely used to support DFI rather than the restructuring of existing producers.

hoped-for impetus for the privatisation and modernisation of the industry with the result that the state had to begin to develop an industrial policy designed to assist modernisation of the auto industry.

In the course of 1993 the Ministry of Industry and Trade began to develop an industrial policy that was not exclusively dependent on privatisation and the attraction of DFI. As a result, at the end of 1993 the value of the investment incentives was reduced and measures designed to assist domestic industry were developed. The policy centred on a series of interim, medium and long term goals to restructure and modernise Hungarian industry (see MIT 1993 and Table 4.5). Regarding the Hungarian automotive industry the most important element of the new industrial policy was the crisis management programme (see Kapitány 1993[16]). The programme involved the so-called 'dirty-dozen' or twelve major engineering companies, including IKARUS and RABA, and one corporation in liquidation, Csepel Auto (see Table 4.6). As part of the programme the government committed itself to spending HUF 30bn on long term subsidies. It was anticipated that HUF 10bn would be allocated to supporting the three automotive firms alone in the form of debt restructuring and consolidation (in conjunction with their privatisation by ÁV), subsidies, and privatisation revenue. Thus the state took steps to guarantee the continuation of commercial vehicle manufacturing. In addition these companies were permitted to apply to the Employment and Regional Development Funds to support restructuring costs. As a result IKARUS was able to secure HUF 100m from these two funds.

[16] This manuscript was commissioned by the MIT.

The most important element of industrial policy for the rest of the engineering sector was the National Technical Development Committee Fund worth around HUF 10bn in 1993. Domestic industrial concerns could apply for financial support to take out commercial loans to enable them to invest in new technology in order to penetrate new markets and boost exports. In addition to this general fund designed to support the modernisation of the engineering sector, the Ministry of Industry and Trade established a special fund worth HUF 200m in 1992 and HUF 250m in 1993 to which only automotive component producers (and especially those contracted to supply Suzuki) could apply[17]. This fund was also used to enable suppliers to take out commercial loans without having to pay the rates of interest set by the banks. Also, as part of its support for IKARUS, MIT established and funded a project to develop quality control systems in its twelve most important suppliers.

Eastern Germany

Following its formation by the last soviet-type government in 1990, the Treuhandanstalt was intended to be an instrument of industrial policy (THA 1991). However, even though the THA's purpose and functions were altered in the course of unification it remained the most important institutional influence on industrial development in the region. Not least, it remained for some years following unification a very major employer in the new Länder. Initially, the THA's influence was exercised through the manner in which it pursued privatisation. Later, it became a more direct instrument of industrial policy.

[17] This gave an indication of the extent to which the state's involvement in the Suzuki project was an instrument of industrial policy.

Although the federal government argued that the THA should not become an instrument of industrial policy, in the course of privatisation it shaped the path of industrial development in a number of crucial ways (see, for example, Bundesministerium für Wirtschaft 1993). For example, in deciding not to subsidise production of the Trabant and Wartburg resulting in the termination of vehicle production, the THA made it impossible for the component sector to penetrate new markets to replace those lost (despite the establishment of the joint ventures with Opel, VW and Mercedes-Benz). At the same time the THA refused to support the majority of the business plans drawn up by component producers and was unwilling to provide them with adequate capital investment (see Lungwitz 1991)[18]. As a result THA owned enterprises had no choice but to wind down production and place workers on short time working. As part of this process the THA shied away from taking over day-to-day control (to do so would have destroyed its claim to technocratic neutrality), but in the majority of cases replaced the old management with new west German personnel. The THA did, however receive frequent reports concerning the financial situation of the enterprises, including the estimated costs of liquidation, and set it 'bench marks', usually turnover per employee, that management had to meet. These disciplines resulted in the contraction of research and development capacity in its enterprises and the establishment of marketing and sales functions which under the planning system had been provided centrally. Starved of the resources needed to rehabilitate itself the east German automotive sector became dependent on its counterpart in the west.

[18] The THA provided between DM 50-60bn per year to its enterprises but little was directed to capital investment. Where an enterprise sought a large sum for investment it was passed on to an independent advisory committee to decide whether the funds should be made available.

The environment was thus ripe for western investors to dominate and refashion the industry thanks to the policy of the THA. Simultaneously, the THA smoothed the path for western investors by socialising risk. Thus the agency divided state property into profit centres and assumed responsibility for non-profit making operations. Even in the cases where facilities were privatised, the *Treuhand* agreed to take over responsibility for cutting the workforce (including the funding of 'social plans' where it involved more than 10pc of the employees), the old debt liabilities and 90pc of the cost of cleaning up pollution (Federal Ministry of Economics 1993a). For their part the investors set about establishing production and with it began to re-write the geography and practices of the German automobile industry. This was *de facto* the industrial policy for the new Länder. As a result it raised suspicions amongst east German managers and workers alike that the agency was determined not to aid the creation of a vibrant independent east German automotive component sector which would be in competition with one, already under severe burdens, in the west of the country.

As the speed of privatisation slowed the THA played a more proactive role in restructuring and reorganising its enterprises. In the course of doing so the THA contributed to the *privatisation of industrial policy* as more and more external (west German) consultants were employed to devise business plans for its enterprises. As a result the THA became more important in re-designing the product profile of enterprises. Increasingly the restructuring involved the 'modularisation' of state owned firms into many smaller firms. The next step in this strategy was for potential

investors to indicate exactly what their requirements were, for example the type and size of the building and site they required in addition to the number of employees, upon which the THA would use its consultants to create such a package. As a result the THA played an important role in refashioning the social division of labour as firms were 'modularised' to meet the requirements posed by potential investors. This led to the transformation of specialist assets, designed to produce specific auto-related products, into little more than general business units for investors who offered to employ people. As a result the THA contributed to the 'hollowing-out' of the auto industry but also, more generally, to undermining the region's industrial capability.

At the same time the number of MBOs increased. However, because MBOs were newly formed firms the THA was not permitted to provide financial support (although there were other subsidy programmes (see below)). But the THA did give start-up finance and in some circumstances interest free loans and other exceptional grants. In addition, the THA granted investors capital to cover investment not committed whilst enterprises were owned by the THA (another indication of the low level of investment that the THA permitted).

In addition to the THA the most important industrial policy instrument was the package of investment incentives that was offered by the Federal Ministry of Economics to attract 'foreign' investment from west Germany and beyond. In 1992 the package of assistance and incentives was expanded and increased in value as part of the 'Eastern Upswing' project (Federal Ministry of Economics 1992). There were three types of incentive: tax concessions and investment subsidies, special lending

programmes, and sales promotion schemes. They were administered by the Kreditanstalt für Wiederaufbau (the state owned bank created to administer Marshall Aid after the Second World War) (see Kreditanstalt für Wiederaufbau 1992)[19]. The most important type of incentives were the tax concessions and investment subsidies comprising investment bonuses and subsidies (including regional economic incentives for investment) and special depreciation allowances/tax concessions.

The most important form of assistance to investors was the regional investment grant programme. This permitted a subsidy of 23pc of the cost of constructing 'greenfield' manufacturing facilities anywhere in the new Länder in accordance with the 'positive list', or in other words operations which contributed to supraregional sales and enhanced the region's economic infrastructure[20]. Secondly, investors were entitled to a tax free bonus worth 12pc of the value of capital investment (excluding buildings)[21]. The third most important form of assistance involved accelerated depreciation of capital equipment and buildings (up to 50pc in the year of the investment or any one of the four years thereafter) which reduced tax liabilities. In addition there were a number of 'tax-holidays'. The fourth type of incentive was the equity capital assistance programme which boosted an equity capital base up to a maximum of DM 2 million via a 'soft' loan over 20 years. Also there were a large number of 'soft' loan and loan guarantee schemes, including the European Recovery Programme funded by the EU, for new and existing firms. The combined

[19] In total there were in excess of 24 different investment incentive programmes (Federal Ministry of Economics 1993b).

[20] Where an investor expanded or converted existing operations it was entitled to a 20pc and 15pc subsidy respectively. However, if an investor intended to save a failed or failing enterprise it was entitled to a 23pc investment subsidy.

[21] The value of the tax free investment bonus was gradually reduced to 5pc of capital investment (excluding buildings).

effect of the incentives package meant that up to 53.7pc of an investment could be paid for by incentives and tax savings where 70pc of the investment was in capital equipment and the remainder in buildings.

The final significant instrument of industrial policy in the new Länder centred on the promotion of research and development. Following unification, research and development functions were closed and many skilled worker migrated to western Germany. To compensate for this the Ministry of Economics established the Promotion of Innovation and Research and Development Personnel programmes. As a result enterprises were entitled to 40pc of the cost of R&D projects and staff costs up to a maximum of around DM1 million per enterprise per year.

Thus, by the time the climate in Germany changed and the THA began to play a more active role in industrial policy matters, the auto industry had either been liquidated or, after a fashion, privatised. The most important industrial policy for the auto sector was its closure, leaving the industry to depend on the market and the industry in west Germany in general and three large firms in particular. This left an industry divided into two types of firms. First, there were companies which had been privatised. However, the dynamics of the privatisation process involved the sale of 'assets', rather than businesses or 'going-concerns', which may or may not have been acquired by auto producers. In this way the industrial structure of the region was dramatically altered which had important implications for its future regional development. The second group comprised poorly financed enterprises sold in the form of MBOs and those still owned by the THA. The short term future of these

firms had been secured but they lacked the capacity to adapt to the new conditions and faced a future of marginalisation.

4.4 Creating a car market in Hungary and eastern Germany

Under the soviet system there had not been a market for cars in either Hungary or the GDR. As we have seen the production of cars was the outcome of political bargaining between ministries and enterprises during the design and execution of the plan. Similarly, the trade in and sale of automobiles was managed by a state monopoly, called Merkur in Hungary and IFA-Vertrieb in East Germany[22]. Under the soviet system the private consumption of goods such as motor cars was severely restricted. The soviet system required rigid control of consumption to prevent markets developing. This was achieved in two ways. First, the volume of products that could be consumed was restricted by the plan in order that the balance of purchasing power within the economy could be tightly regulated (c.f. Kornai's theory of a shortage economy). The second way of controlling consumption was by restricting the number of sales outlets and by enterprises remunerating workers in kind as a way of socialising consumption.

In both Hungary and the GDR automobile ownership was poorly developed by west European standards and would-be customers often waited between 10 and 15 years for a vehicle. Hungary had a history of low levels of car ownership even compared with some other CMEA countries. In 1960 there were just three cars per thousand of the population compared with 17 in the GDR. Car ownership increased

22 In addition, in the GDR the VEB Maschinen und Materialreserve enterprise traded second hand vehicles.

considerably in both countries but Hungary continued to lag behind the GDR. There were 168 cars per thousand of the population in Hungary in 1989 - by which time car imports had been liberalised - in contrast to 266 in the GDR (see Table 4.5). Both countries continued to lag well behind the west European average of 431 (Pemberton 1991, 135).

Hungary

Once the soviet system began to unwind central control of consumption was lost and a market for cars developed on the basis of vehicles as a store of value rather than, as they had in the past, representing preferential - or in other words, politically determined - access to a resource. However, a market could only begin to develop once it was possible for cars to be supplied. Thus in the case of Hungary the most important decision was made in 1989 when measures relating to the private import of cars from western Europe were relaxed[23]. The immense frustrated demand under the previous regime resulted in the private importation of 70,000 cars in 1989, representing 40pc of all the cars sold in that year, effectively breaking the monopoly previously enjoyed by Merkur (Kapitány 1992). As it was car registration increased from an average during the 1980s in the region of 120,000 per year to 215,000 in 1990 (see Kapitány 1992). As a result between 1989 and 1990 the level of car ownership per thousand of the population increased 12.5pc from 168 to 189 (see Table 4.5).

The manner in which the government structured the market was significant. Initially the majority of imports were of used cars and whilst that gave a much needed

[23] For an overview of import liberalisation see Nagy 1994.

boost to the replacement market in continental Europe it postponed the integration of the market into west Europe's. Thus the growth in the market was temporarily curbed as the Hungarian government introduced a 25pc duty on the private importation of cars. This temporarily renewed the interest of Hungarian consumers in east European cars. The longer term effect, however, was the establishment of a new car market under the control of distributors and dealers, selected or managed directly by the motor manufacturers themselves, selling vehicles at prices not dissimilar from those in the west. Thus demand in the market place was profitable and all the major companies established widespread dealership networks in Hungary.

However, as the price of vehicles increased so did the other costs associated with motoring. The reduction of subsidies and the restructuring of the tax system resulted in a dramatic increase in petrol prices and the government's introduction of compulsory insurance for all drivers resulted in a huge increase in the cost of motoring. All these changes resulted in a decline in the total car market from around 215,000 in 1990 to approximately 150,000 in 1991 although there was an increase in the number of new car registrations (Kapitány 1992; see also Table 4.8). At the same time the trade in vehicles was transformed from being dominated by cars of CMEA origin to one dominated by vehicles from the west. This undermined Hungary's position within the CMEA trading system, which subsequently collapsed, and led to a large dollar trading deficit.

One uncertainty remained: with the establishment by Suzuki and GM Europe of vehicle assembly operations in Hungary, concern was expressed that the large

number of imports might hinder the development of the investments. As part of the liberalisation of the market the Hungarian government had granted a quota of duty-free imports which was duly fulfilled. For GM, in particular, this was especially galling as its had only agreed to establish a car assembly operation in return for preferential market access. Both GM and Suzuki successfully sought to have the quota reduced in size to improve the prospect of them selling the vehicles assembled on Hungarian soil in the domestic car market. This involved the unusual situation of an east European state increasing the protection of its domestic market; the *Financial Times* (30/31 May 1992, 2) commented at the time:

> "Ironically, western multinationals have become eastern Europe's most effective lobby for protection and their efforts to link investment commitments to guaranteed markets have become all the more intense as local demand has fallen below expectations."

As western manufacturers established dealership networks in Hungary the government sought to put vehicle imports on a different footing by limiting the volume of private import licenses. Thus between 1992 and 1994 the size of the quotas was consistently reduced enabling the official importers of new cars a bigger market share. By the end of 1994, in which year there were 15,000 imports, the rules were such that the private importation of cars was made effectively impossible. As the market failed to grow and local manufacturing of cars commenced the market was skewed in favour of firms involved in local manufacturing, Suzuki and GM, which were exempt from a 22.5pc tariff imposed on imports by other firms. As Suzuki, in particular, had problems winning market share more pressure was placed on the government to protect the market. This took the form of lobbying the government to

introduce new environmental regulations, and cash incentives to owners of polluting two-stroke powered Trabants if they replaced them with a new environmentally-friendly vehicle. It was no coincidence that at the top of the government's list of approved vehicles - and therefore attracting the largest cash incentive - was the Suzuki Swift.

Of equal importance to the domestic market was Hungary's trading relationship with the EU (see Tovias 1991). The Association Treaty between Hungary and the EU, signed early in 1992, was intended to create a free flow of industrial goods within ten years, and included the abolition of most quotas and phased reduction of tariffs (see Foreign and Commonwealth Office 1992). However, the Treaty included restrictions on a number of Hungary's major exports, textile products for instance, and also a quota for duty free exports of complete passenger vehicles (ECU 44.1 million in the first year) and buses (ECU 1.1 million). Moreover, the quotas included other provisions covering local content - which had to exceed 60pc for a product to be counted as Hungarian and thus part of a quota allocation - and technical standards. Equally significant was Article 30 of the Treaty which included the provision for the re-erection of trade barriers if necessary to safeguard threatened domestic industries. Crucially, however, whilst the treaty placed a quota on cars and buses it did not so limit on the exportation of automotive components to the EU market.

East Germany

The fall of the Berlin Wall created a *de facto* market for automobiles in the GDR. Immediately, thousands of second hand (including stolen) vehicles were exported from West Germany to the east. Monetary union in July 1990 (which set the exchange rate at one Ostmark to one Deutschmark) considerably increased the value of east German savings. The result was a surge in demand as nearly one million vehicles were registered in the new Länder in 1990, including 800,000 used cars from western Germany. In 1991 750,000 cars were purchased which meant that the number of registered vehicles in the new German states had increased by one third to around 6.3 million units between 1989 and 1992. By the end of 1991 the automobile ownership density in the new German states had increased in just three years from 232 per thousand inhabitants to 394, and yet remained some 100 less than in western Germany.

As with Hungary, eastern Germany was an important potential market (at a time when the west German market was becoming increasingly saturated). It was calculated that in order for automobile ownership in eastern Germany to match the level in the west, production of at least 4.3 million automobiles would be needed (Pemberton 1991). Whilst this was widely seen as an unrealistic scenario, buoyed by surveys which showed the automobile to be the east Germans' most sought after consumer product, forecasts made in the early 1990s anticipated sales of between 300,000 and 600,000 units in 1995 (see, for example, Federal Office of Foreign Trade Information 1991).

4.5 Transforming organised workplace interests: The industrial relations system in the Hungarian and eastern German automotive industries

The third way in which the state shaped the transformation of the automotive industry in Hungary and the former GDR was through the development of 'agency' to create, articulate, organise and represent employer and employee interests. Pedersen *et al.* (1995, 741-2) identified a three-stage transformation in interest representation which usefully highlights the key developments and provides a comparative framework. The first stage involved the gradual erosion of the classical soviet system in which interests were indivisible from that of the party-state. The second stage, from around the middle of 1988, has involved the disintegration of the official system of interest representation. The third, and final phase involves the reintegration of tentative interests as new interests are (re)asserted and new modes of co-ordination and bargaining are established. First we examine the erosion and disintegration of the industrial relations system, beyond the workplace, which referred to the automotive industry in the two countries. Second, we consider the extent to which 'agency' created and interests articulated with respect to the two most important unions, VASAS in Hungary and IGM in east Germany, in the vehicle manufacturing sector[24].

4.5.1 The national industrial relations system

The post-war industrial relations systems in Hungary and the GDR closely resembled the soviet system in comprising two main elements (see Petkov and Thirkell 1991). First, centralised control over the economy, which included the

[24] This section primarily concentrates on the industrial relations system and trade unions from the point of view beyond the workplace. Chapter six examines in detail the transformation of industrial relations, and the role of unions, in the workplace.

dispersal of the wage fund (see Kornai 1992), and the lack of autonomy for state firms, limited the scope for enterprise strategy (Vickerstaff *et al.*, 1994) and therefore the 'agency' for management-labour bargaining. Second, political and ideological monopolisation by the ruling party precluded independent institutions representing workers' interest. As a result trade unions and workplace labour bodies became 'transmission belts' merely conveying information and resources from the ruling elite to the workers (Pedersen *et al.*, 1995)

However, there were significant differences in the erosion and disintegration of the industrial relations systems in Hungary and the former GDR which had significant implications for the development of the auto industries in the two countries. Whereas the GDR's Labour Code in 1978 granted formal 'co-determination' rights without the means to exercise them, in Hungary the New Economic Mechanism and the other post-1968 reforms established a new institutional structure which granted workers a more effective participatory role and permitted the articulation of employer and employee interests more-or-less independent from the state. Crucially, the industrial relations system in Hungary eroded in the course of the end of the soviet era whereas in the GDR erosion and disintegration only occurred after the soviet system had itself collapsed. This had two important consequences. First, more continuity with the soviet regime can be identified in Hungary, in the form of tripartite corporatism, compared to the former GDR where the system of interest representation was entirely destroyed and substituted by the West German one. Second, the transformation of interest representation, although less dramatic was negotiated in Hungary as compared to imposed in the former GDR. The outcome of these two

paths of development was paradoxical: whereas industrial relations *structures* were significantly more established in eastern Germany, interests were better *represented* in Hungary. The different course of events in the two countries had far-reaching implications for the development of the automotive industry.

Hungary

The communists took control of trade unionism in 1945 and established the national council of trade unions (SZOT) comprising 19 industrial unions (Czakó and Sipos 1990). Until 1968 the traditional soviet system of industrial relations, in which the functions and interests of the state, employers, employees (and their representative bodies) were indivisible from that of the political elite, was dominant (Héthy 1991). As a result the trade unions were organised sectorally and included all grades of workers and management (Gill 1990). However, the introduction of the NEM in 1968, which replaced direct bureaucratic central co-ordination of the economy with a system of regulation through incentives and disincentives, resulted in greater enterprise autonomy and the space for the articulation of management-labour bargaining (Héthy 1991). The state ideology acknowledged antagonism within society and permitted unions to extend their 'transmission belt' role to include limited representation of workers. As a result collective agreements stopped including plan targets and became solely concerned with bureaucratic labour issues. At the same time, in formal terms labour strikes were legalised. Also at the same time an employers' association was formed, the Chamber of Economy. It remained relatively powerless but began the process of separating the role of employers from that of the state.

In the course of the 1970s and 1980s new institutions were created which increased the role of workers in the management of state owned enterprises. These changes culminated in the establishment of Enterprise Councils in 1985 (Government Decree No 33/1984) which permitted workers the right to co-manage state firms. However, despite the formal rights of 'self-management' in practice the traditional managers in the firms remained dominant (Neumann 1993). At the same time a new system of employment was introduced through the establishment of VGMKs - in which work was subcontracted by the enterprise to 'core' workers (Neumann 1993). The changes restricted the role of the centre in establishing wage rates. Nevertheless, the state continued to play a significant role in wage determination right up until the end of 1988 (Cukor and Kövari 1991). Overall the post-1968 period saw the development of a corporatist system in which the major social partners compromised to form a broad consensus behind the party-state's economic reforms (Hughes 1994). This helped to prevent the articulation of separate interests within society from generating conflict. Thus despite increased freedoms industrial conflict was minimal.

As the political system broke down the industrial relations system began to alter dramatically. Of particular significance was the establishment in 1988 of the Council for Reconciliation of Interests (CRI), with representatives from government, employers' associations and trade unions. Its formation reinforced the continuation of a broadly corporatist model but also underlined a desire to negotiate a broadly consensual approach to transformation. However, until 1990, when there was a major strike by taxi drivers, the council had little real influence on government but once the council had been established the state withdrew from wage determination and

permitted national level bargaining (Héthy 1991). Gradually, the powers of the CRI increased to include the definition of minimum wages, and minimum and maximum wage increases.

In the course of this period the trade union movement underwent radical changes. In 1988 SZOT began to assert its independence and in 1990 it was reorganised into the National Confederation of Hungarian Trade Unions (MSZOSZ) (see also Gill 1990, Hughes 1992). As this occurred there was a pluralisation of the trade union movement as new independent trade unions, led by the National Federation of Workers Councils (MOSZ)[25] and Democratic League of Independent Trade Unions (LIGA), were established (see Gill 1990, Hughes 1992)[26]. However, the new unions mostly comprised white collar employees and were slow to recruit manual workers, where the traditional unions remained dominant. This influence was increased in 1990 when the government established the trade union Round Table, comprising the seven major trade unions, to co-ordinate employee interest in the CRI. Thus the seven members of the Round Table were permitted seats in the Council for Interest Reconciliation[27]. To reflect the changing role of the unions the government reformed the legal situation. The government passed the Strike Act in 1989, which permitted collective labour disputes and other interim labour legislation was introduced which allowed trade unions to seek collective bargaining agreements with

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25 Workers' Councils were the force behind the anti-Stalinist movement in 1956.

26 By the middle of 1993 there were between 70 and 80 trade unions operating but the vast majority of them were very small.

27 The seven unions/federations represented in the CIR were Autonomous Unions, ESZT (intellectuals), LIGA, MSZOSZ, MOSZ, SZEF (Forum of Cooperation of Trade Unions), and Solidarity.

employers. The result was a proliferation of labour organisations and a chaotic environment for management-labour bargaining. Thus although the unions had become more independent this had been at the cost of influence. Most important was the repeal of trade union rights to co-management in 1991 by the Constitutional Court. Also, in the course of these events the level of unionisation fell from 95-6pc to under 50pc (see Table 4.9).

At the same time as the trade union movement was reorganised so too were the employers associations. The existing associations were reorganised to concentrate on sectoral interests and new ones, such as the National Association of Entrepreneurs (VOSZ), were formed (Héthy 1991). Later, the Hungarian Association of International Companies (HAIC) was formed to lobby government on behalf of the foreign investors in the country. The HAIC was led by the director of GE-Tungsram but also prominently featured representatives from other major auto investors, Ford and Suzuki. By the middle of 1993 there were nine significant employers organisations with seats on the CRI.

The CRI was granted additional powers to those of wage bargaining and set about reconstructing the industrial relations system and rewriting the labour code (Héthy 1995). In August 1992 the council proposed a six-year programme of trade union elections and a procedure to distribute SZOT's property and other assets amongst the new unions (see Szabo 1992, Borbély 1993). The proposal met with much opposition and united the trade unions, which up to then had been bitterly divided.

At the same time as the industrial relations system was eroded, the newly elected HDF government commenced privatisation (see above). The result was a period of disintegration as the statutory industrial relations system bore little relevance to the broader socio-economic changes. Thus the system failed to co-ordinate and articulate interests with the result that events proceeded spontaneously in different places. One result was the establishment of ephemeral workers' councils in state firms (Burawoy 1992) and also an outbreak of strikes (Mako and Simonyi 1991). The most important issue was that of privatisation. In particular the organisation of privatisation (see above) effectively excluded employees and their representatives from playing a significant role (Neumann 1991, Héthy 1995). After the creation of the SPA in 1990 privatisation was taken out of the realm of the enterprise and into bureaucratic hands which trade unions could only hope to influence through the CRI by arguing in favour of employee ownership schemes (MSZOSZ 1993).

The government seemed unwilling to refashion the statutory basis of the industrial relations system (Neumann 1991). However, in July 1992 following the agreement of the CRI the government introduced a new Labour Code (Act XXII of 1992) (see Ministry of Labour 1992)[28]. In the course of rewriting labour law the code abolished any form of co-management in the form of Enterprise Councils and replaced it with a system based on the election of works councils. In doing so, the code established a 'hollowed out' version of West German labour law (see below)

[28] In total there were three separate Labour Codes, one each for the competitive (private) sector, the state-owned sector and one for public servants. However, in key respects they closely resembled each other.

establishing some of the institutional forms but crucially without the powers needed to make them influential. Before codifying the new legal situation in detail the code established three important principles as the basis of the new system of workplace interest representation. Firstly, the code established its own legitimacy, not by reference to the state but by underlining the primary role played by the CRI in the labour relations system and the formulation of labour law. Secondly, the code also codified the social basis of economic enterprises. Thus whereas under the soviet system both management and workers were regarded as employees of the state, the new Labour Code established the separate roles, rights, duties and responsibilities of employers and employees. Accordingly, paragraph three (section one) of the code begins by demanding co-operation between the employer, the works council and employees. It goes on to state:

> "... [E]mployees must not behave in a manner during the existence of the labour relationship which would jeopardise the legitimate business interests of their employer." (Ministry of Labour 1992, 2).

Thirdly, the code specified the role to be played by trade unions and the sorts of conditions they could expect within the workplace. In doing so, despite the provisions to establish works councils (see below) trade unions remained the agent of bargaining with employers.

The most important elements of the labour code were as follows. Firstly, the rules of work identified the rights of employers and employees. Thus employers had to organise work in a safe manner that did not preclude employee rights and had to

ensure the provision of the necessary information and skills required for the employee to carry out the job, and pay according to the labour contract. Meanwhile an employee must report to work at the place and time agreed, fit for work and must work the entire shift. In addition an employee must "perform his [sic] work [including preparatory and finishing operations] with expected skill and care in accordance with the regulations provisions and instructions applicable to his job" (Ministry of Labour 1992, 40). The code goes on to state that an "employee shall act in accordance with the instructions of his [sic] employer"[29] (Ministry of Labour 1992, 41). To discourage 'moonlighting' employees were prevented from taking secondary employment without the assent of their employer. In this way the code played a very significant role in changing the statutory basis of the social relations of production.

Secondly, the code granted trade unions a statutory basis and/or consultative rights within the workplace where either (a) its nominees gained at least 10pc of all the votes cast by the workforce in the election of works councils (b) it gained 10pc of the votes cast nationally or (c) where two-thirds of the employees in the enterprise were members of the union. Where a trade union was recognised the employers were duty bound to inform the union where 25pc of the employees (or 50 individuals) were to be affected by a management decision. In addition trade unions could request information from employers that affect employees economic and social interests connected to their employment.

[29] Except for where doing so would involve violating the law.

Thirdly, where a trade union's (or coalition of trade unions) nominees attained at least 50pc of the votes cast in works council elections they were entitled to conclude a collective agreement covering the rights and responsibilities arising from employment. In addition parties to the agreement were permitted to petition the Minister of Labour to extend it to include an entire economic sector or sub-sector.

Fourthly, the code identified employee's 'participative rights' which were to be exercised by a works council. All plants which employed at least 51 employees had to institute a 'works council' (plants employing at least 15 workers but less than 51 had to elect a 'plant representative'). The size of the works council varied from three, where the number of employees did not exceed 100, to 13 where employees exceeded 1,000. Where an employer had more than one facility a central works council had to be established. Despite the code enforcing the establishment of a works council a degree of ambiguity developed concerning the process by which this was to occurs. It seemed to place the onus upon trade union representatives, rather than the employer, within each plant to set in motion the procedure for electing a works council. This implied that in enterprises without trade union representatives or employees pushing for a works council, there was no need for the employer to organise the election of a works council. This permitted some employers, including for example Ford Hungaria (see chapter 6), to argue that the code did not force them to establish a works council since their employees did not seek one.

Although the code described the rights of the works council as participative, in reality they were all consultative except with respect to the allocation of welfare funds

and health and safety issues. With regard to other matters (firm restructuring, working norms/organisation, holidays) the employer had to merely 'elicit the opinion' of the works council. The employer also had to inform the works council about the firm's economic situation, major projects and remuneration system. In addition, the works council was permitted to request other information connected to employees' economic and social interests which the employer should provide. Crucially, however, para. 70 of the code stated that the:

> "... works council shall remain unbiased concerning strikes organised at the employer. Accordingly, it shall neither organise, nor support or preclude strikes. The membership of the works council member that participates in a strike shall be suspended for the duration of the strike." (Ministry of Labour 1992, 27).

Fifthly, the labour code also established statutory employment standards with regard to working hours, remuneration, holidays, severance procedures, sick leave, other conditions of employment and grievance procedures. The working day was set at eight hours, including a minimum 20 minute rest, and an employee had to be allowed eleven hours of leisure before commencing the next working day/shift. The code established a ceiling of 144[30] hours of overtime per year, including a maximum of four hours in any one day, eight hours in two consec tive days, and eight hours in any one week. The code also laid down a set of supplements depending on employment conditions; night work entitled employees to a 15pc bonus, and a multiple-shift or continuous work schedule entitled employees to a 15-20pc bonus for the afternoon shift and 30-40pc for the night shift. The code also increased statutory basic paid leave from 15 to 20 days. In addition, the code did not remove an

[30] Under certain circumstances this could be increased to 200 hours.

employee's right to 10 days uncertificated sick leave per year, an omission which generated criticism from many foreign employers.

Enactment of the Labour Code prompted considerable criticism by western firms which had invested in Hungary to escape west European labour regulations. In particular, the rules governing overtime were claimed by employers as likely to result in a substantial increase in costs. Revealingly, David Young of Price Waterhouse, a consultant for foreign investors in Budapest put it: 'From an employer's point of view, the move brings Hungary too close to Western standards too soon' (quoted in *Business Eastern Europe* 21 August 1992, 458). Later a Price Waterhouse bulletin commented: 'Many foreign investors feel the law is much too liberal for a country at Hungary's stage of development' (Price Waterhouse 1992, 3). One effect of this was to hasten the creation of the HAIC which lobbied for the code to be amended (*Business Central Europe* 1993). However, despite the response by foreign investors the impact of the new code remained to be seen. Crucially, the role of the code depended on two things. First, the extent to which the trade unions proved able to establish organisational structures beyond Budapest and not least in gaining a foothold in the new foreign owned plants. Second, the ability of works council representatives to exercise their, admittedly moderate, powers. Thus it was unclear whether the creation of works councils would focus and institutionalise trade union power within enterprises or act to dissipate union influence even further with works council becoming more akin to company councils. In the light of the weakness of trade unions and their lack of regional organisation, there was widespread suspicion

amongst many workers that the labour code would further undermine their influence and enable employers to use pliant workplace bodies to their advantage.

In May 1993 the majority of the first elections for the works councils, set up under the labour code, were held in factories across the country. In virtually all the economic sectors the traditional unions, affiliated to MSZOSZ, were most successful in securing their representatives elected onto the councils[31]. Nationally, MSZOSZ nominees won 71pc of the vote, the autonomous unions 18pc and LIGA 6pc (Makó and Simonyi 1995, 194). There were similar results in the automotive industry (see below). One of the first elections in the country took place at GM Hungary's engine and CKD plant in Szentgotthárd which attracted a lot of attention amongst other foreign investors. In the course of late 1992 a dispute over wages and overtime resulted in the establishment of a plant based trade union with 200 of the 500 employees as members (*Magyar Hirlap* 9 June 1993). By the time of the works council election in March 1993, membership of the union had increased to 45pc of the workforce, but union nominees secured only five of the eleven council representatives thus denying it exclusive rights to collective bargaining. In response to these events other employers, such as Suzuki, decided to establish a works council even though there was little movement for one amongst the workforce as a means of pre-empting

[31] The popularity of the traditional unions over the newly established ones was underlined in national elections (open to all adults) for the trade union representatives (of the seven unions with seats on the Council for Interest Reconciliation) to sit on the bodies responsible for managing pension and health insurance which also took place in May 1993. MSZOSZ won 50.1pc of the votes cast (around 40pc higher than the next most popular union, MSOZ), entitling it to 18 of the 33 trade union representatives on the pension insurance board. MSZOSZ's dominance was less marked in the vote for the health insurance board but it still polled 45.2pc of the vote and secured 15 of the 30 trade union representatives. The turnout for the elections was around 40pc of the electorate (see MSZOSZ 1993b). In addition, Héthy's (1995) study of three companies also indicated the popularity of the traditional trade unions.

militant demands that might have arisen later. It remained to be seen whether the works councils would increase the power of employees in domestic and foreign owned enterprises or not.

East Germany

The Confederation of Free German Trade Unions (FDGB) was formed in 1946 (see Dennis 1988). From 1947 onwards the SED gradually asserted control over the trade unions and replaced independent workers' councils with controlled local trade union branches within the enterprises (see McCauley 1983); a free trade union movement was thus subverted into a 'transmission belt' for the SED (Dennis 1988, 105) and written into the constitution of the state. Thus article 44 of the GDR constitution described the FDGB as 'the all-embracing class organisation of the working class' (quoted in Childs 1983, 158). FDGB was a federation of 16 branch based trade unions, including IG Metall Ost (IGMO) covering metalworkers (including employees in the automotive industry), but was very highly centralised. Membership of FDGB peaked at 9.1 million (97pc of the working population) in 1982. Within FDGB, IGMO was the largest union with 1.6 million (97.7pc of all metalworkers) in 1976 (McCauley 1983, 162). State ownership and central control over the economy precluded genuine trade union influence (McCauley 1983). In due course after a series of industrial disputes reforms were introduced which undermined the power and influence of labour. In 1961 the unions lost the right to strike. However, the 1978 Labour Code formally granted trade unions additional powers of 'co-determination' exercised through the enterprise Betriebgewerkorganisation (BGO) (Dennis 1988, 160), although in practice this did not increase the power of unions,

since the BGO's had no influence over the appointment of senior management nor economic decision making.

The absence of any changes to the economic system which would have decentralised economic decision making and provided space for enterprise strategies prevented labour-management bargaining. Indeed the organisation of industry into *Kombinate* from the late 1960s restricted further the decision making competence of enterprises. In addition the absolute power of the enterprise director prevented bargaining (von Beyme and Zimmermann 1984). Following the rise of the Solidarity trade union in Poland a number of strikes were held in industrial centres in the course of the 1980s. However, whereas there were reforms in Hungary, in the GDR the labour relations system meant that trade unions remained little more than an instrument of management and became more overbearing in that role as they sought to compensate for economic stagnation. As a result interests within society continued to be seen as indivisible from that of the party-state. Despite this workers in the GDR were more militant, measured by industrial action, and 'ill-disciplined' (see Dennis 1988, 161-2) than in Hungary.

The industrial relations system disintegrated in late 1989 as the Berlin Wall was breached and the state crumbled. The FDGB purged its old leaders and began to assert its independence. In early 1990 it threatened to organise a general strike in support of its demand for a new labour relations act. However, the FDGB was irreparably split over how it should restructure itself. Some wanted to preserve FDGB unions' monopoly within enterprises and favoured a statutory framework that would

give them genuine 'self-management'. Others supported the introduction of a works council system based on that in West Germany. At the same time independent trade union bodies were formed and began to seek links with West German trade unions. In the last parliamentary session before the first free elections in the GDR, held in March 1990, a new labour law (which permitted independent trade unionism and collective labour disputes) and social charter (which guaranteed its citizens education, work and housing) was passed. Whilst these changes occurred the level of labour unrest in the country gradually increased. In July a series of strikes were held in the engineering industry, including the automotive sector, over pay levels, hours, and the form of privatisation - in which employees had little influence. Following the unrest an agreement to restrict the working week to 40 hours, down from a statutory level in excess of 43 hours under the soviet regime, was reached.

At the same time the representation of labour within enterprises was changed, largely in an *ad hoc* fashion. BGOs were dissolved in many factories. In some places new workers councils or committees were established (sometimes by management), but with little effect owing to confusion as to the function and role of such institutions (see Kreißig and Schreiber 1991). Thus the changes amounted to the replacement of local trade union committees by grass roots workers' councils. Crucially, the driving force behind the formation of these institutions was the desire of workers to exercise their proprietorial rights which they had been told for so long that they held but had never been able to realise. This led to some workers' councils entering into collective agreements which covered not only the narrow 'labour interest' but also 'co-management' measures designed to make workers responsible for efficient as well

as equitable production relations (see Kreißig and Schreiber 1991). These bodies were therefore not simply demanding a new form of bargaining within their particular enterprises but were based on a post-Stalinist vision of the GDR. For a time then, there seemed the possibility that changes in the GDR might enhance the role of trade unions and give them real influence in enterprises. However, the speed of German integration and subsequently unification precluded that outcome.

It was monetary union which established the new statutory framework for industrial relations in the GDR. The treaty, which came into effect on 1st July 1990 covered not only monetary and economic union but also social union. Thus article 17 referred to labour law.

> "In the German Democratic Republic freedom of association, autonomy in collective bargaining, legislation relating to industrial action, corporate legal structure, codetermination at board level and protection against dismissal shall apply in line with the law of the Federal Republic of Germany" (quoted in Glaessner 1992, 185).

Following the implementation of this treaty the GDR industrial relations system was dissolved and West German institutions were transplanted into what became the new Länder. Most importantly this meant that the Works Constitution Act (1972) (Der Bundesminister für Arbeit und Sozialordnung 1990) was extended to include the GDR. Thus in October 1990 the first round of works council elections were held according to the transplanted West German legislation. In the previous month the FDGB had dissolved itself and its 8,000 officials were made redundant (payments were made following a loan from the DGB[32]). This led to a problem as to

[32] The West German trade union federation.

who was entitled to the FDGB's assets, which comprised around 300 properties in addition to shares in major enterprises. At the same time West German unions sent over financial and personnel support to their counterparts in East Germany and gradually set up their own organisational structures (Fichter 1991). Following the unity treaty unions implemented plans to replace their counterparts in the former GDR. The speed at which this occurred reflected the fear amongst west German unions that employers would exploit the opportunities offered by rapid integration and use the GDR as a low cost location (undermining the competitiveness of West Germany) and moreover as a pretext to undermine Germany's social market economy.

Whilst the unions established organisational structures in the east so too did employers organisations, mirroring the system in West Germany. As the institutional system was still in the process of being built, in mid-1990 a number of temporary collective agreements were agreed in several sectors. Although the agreements were between the FDGB unions (albeit with considerable support and advice from their West German counterpart) and new East German employers' associations (supported and advised by West German employers' organisations) they marked the beginning of West German-style bargaining. The agreements attempted to compensate workers for monetary union by increasing wages.

The first meaningful round of bargaining did not take place until 1991 when wages were increased from 30pc to around 40pc of west German pay depending on the sector. The metal industry agreement (see below) led the way in the establishment of 'parity pay' between east and west, as the prime aim of bargaining; however, the

timescale for achieving parity varied from sector to sector. As a result the agreements were to last several years compared to the annual contracts in the west. More importantly the need to cope with the conditions in eastern German stretched the industrial relation system. The agreements, which increased costs substantially, were heavily criticised by the government for not establishing the link between productivity and wage increases in the new Länder.

The West German trade unions were so successful in establishing themselves in the new Länder that by the end of 1992 there were 3.8 m members of DGB unions (Bispinck 1993, 310) Thus in 1992 union density was 53pc in the east compared to an average of 35.8pc in western Germany (Bispinck 1993, 310). However, whilst the unions created powerful organisations they were themselves increasingly the focus of criticism of members. In particular a series of demonstrations was held by works councillors against the government and the THA over their role in creating unemployment. Significantly, IGM and other unions did not support these examples of dissent. Initially collective agreements had postponed making workers unemployed until mid-1991. At that time faced with the prospect of a dramatic increase in the unemployment level there was an agreement between the DGB, the THA and employers' associations (despite government opposition). The agreement paved the way for the formation of companies for work promotion, employment and structural development (see also chapter 6). The companies (in total 150 were established) were owned by the THA, employers' association, the unions, and local and regional authorities. However the formation of these companies had an important effect on the position of workers in the local areas and helped shape the strategy of the

unions in the former GDR. Thus where employment promotion companies were established the surplus workers were transferred from their original employer to the new temporary company (the THA had argued that a failure to so would have made the enterprises less attractive to investors). This meant that the original employers' works council no longer represented their effectively unemployed colleagues. In consequence the unions effectively contributed to the marginalisation of surplus labour and prioritised the interests of those in work above those out of it. Thus whereas Hungarian unions retained the membership of most of those made unemployed, in the new Länder the unions became increasingly focused on those in work.

In 1992 the collective agreements signed a year earlier increased pay to between 60 and 70pc of wages in the west. However, in doing so employers and the government became concerned about escalating labour costs. As a result in mid-1992 the government initiated legislation which permitted enterprise managements and works councils to permit companies threatened with closure to pay lower wages than those stipulated in the collective agreements. As the THA remained a very major employer in the new Länder it played an influential role. In August 1992 the THA angered trade unions by directing its companies to refrain from signing collective agreements with employees. It indicated that any existing agreements were to be terminated. The THA also prevented its enterprises from agreeing collective redundancy/dissmissal terms with employees. The THA threatened to cut investment in firms that did not follow the directives. The THA claimed that many of its firms had entered into commitments on job security without any concern for financial

implications (which dissuaded potential investors, according to the agency). In response the DGB argued that unification costs had been placed disproportionately on workers and that the THA should be given the tools to 'rehabilitate' enterprises. This formed the basis of the trade union argument that a structural development plan was needed for the east German economy which preserved so-called 'industrial cores', including the cluster of automotive producers in west Saxony (see above).

In late 1992 negotiations began between the 'social partners' to agree a "Solidarity Pact". An agreement was reached in March 1993 which involved financial transfers to the new Länder funded by additional taxes on west Germans. The unions and employers associations were not party to the pact but wage restraint and increased investment in the east was expected. However, conflict between the social partners over labour relations reached a peak in early 1993. The government and the THA demanded wage restraint and sought the renegotiation of the 1991 collective agreement in the metal industry (see below). The employers terminated the agreement and after a series of strikes a new one was negotiated.

Thus monetary union and subsequently unification resulted in the transplantation of the West German industrial relations system into the new Länder. However, in the course of doing so the system was shown to have been undermined as collective agreements were terminated and dissent amongst east German members (who found it unable to preserve jobs or increase pay) increased. The tradition of independent industrial bargaining was also stretched as the government became increasingly influential, not least through the THA. Thus the German industrial

relations system, following unification, became the object of much criticism (see for instance Kern 1993). However, more significantly rapid unification prevented the establishment of a new form of industrial democracy which seemed possible in the early months of 1990. Nevertheless, trade union organisations were successfully established in the Länder. However they were undermined by the deindustrialisation of the region. Thus DGB union membership in east Germany fell from a peak of 4.2 million to under 3.4m (many of which were not active in the labour force) by the middle of 1993. Overall, the institutions were created but often without the associated habitus with the result that they operated quite differently than in west Germany (see Ettl and Wiesenthak 1994; Jürgens *et al.* 1993).

4.5.2 Trade union strategies in the automotive industry

VASAS in Hungary

The trade union covering the automotive industry in Hungary before and after socio-economic change was VASAS. Formed in 1877, after the communist take-over the metalworkers' union became one of the 19 industrial unions that comprised SZOT. The union was reorganised along the soviet model: it was highly centralised and represented both management and workers since both were employees of the state. Thus VASAS became a federation of enterprise-based local trade unions in the metal industry. The union was led by a President (and his two deputies) who were elected by the annual Congress of the union which comprised 586 delegates elected by the local union's membership (see Figure 4.1). The executive body of the federation was the Presidium which consisted of 21 representatives of the sub-branches, the regions and special category members. In addition the Presidium included one representative

from Dunafer, the giant Hungarian iron and steel-maker. The union also had an advisory institution, the Federation Council, which comprised 150 representatives of the affiliated local unions (1 representative for every 5,000 members) and delegates from the largest enterprise unions. The council met up to five times a year (more during industrial disputes) to approve important union matters, such as the annual budget.

VASAS's headquarters in Budapest acted as a central agency for the affiliated local unions. As a result the union had no regional organisation of its own, such as regional offices, and so it could only exercise influence through the local unions in individual enterprises. Thus although Hungarian trade unions became less like 'transmission belts' for the party-state, their organisational structure did not change to reflect the new role. The membership was organised according to three dimensions, branch, region and type of member, which was reflected in the Presidium. The affiliated local unions were organised into branches. There were nine main sub-branches; the metallurgy branch was the largest and most influential in the union. The vehicle manufacturing branch comprised the eight largest firms including IKARUS, RABA, Csepel Auto and a number of military sector producers. The tenth branch was an amalgamation of other smaller sectors. In effect when local unions affiliated to VASAS they joined a branch of their choice. Local unions in each branch elected a President who sat on the Presidium (the tenth amalgamated branch elected three people). In addition the Presidium also comprised three presidents who represented three 'super-regions'. The final three members of the Presidium represented particular types of members (women, pensioners, white collar workers).

Although the independence of the union increased in the course of the 1980s it remained wedded to the ruling party and continued to be identified as a mouthpiece of management since the union-management coalition was most powerful in the metalworking industry. Thus whereas the union was unable to represent worker's interests' as an organisation it was powerful. This was symbolically reflected in the level of unionisation. The union's membership peaked at around 500,000 in the early 1980s (of which around one-third were pensioners), which represented some 85pc of the workforce in the engineering and metallurgy industries.

As the role of the trade unions changed in the late 1980s and early 1990s the union's organisational structure was not substantially reformed. The size of the Federation Council was reduced from 150 to 88 to reflect the union's falling membership. However, whilst the structure of the union remained unchanged, the personnel altered substantially. Some 70pc of the delegates to the Federation Council, and 90pc of the Presidium members were first elected after 1989. Significantly, however, many of the union officials working at the head office remained the same from the earlier era. However, several other changes took place as the union transformed itself from being an adjunct of the ruling party and enterprise managements into an independent trade union. First, party secretaries were forced to leave the union (ordinary party members were unaffected). Second, all the union's members had to reaffirm their membership in 1990. Third, the union rewrote its constitution to bring it into line with west European union and affirmed its party political neutrality and its acceptance of a social market economy.

Through its external links the union had some influence over broader changes. It remained a member of SZOT as it transformed itself into MSZOSZ (see above) which gave it an opportunity to help shape the restructuring of trade unionism. The VASAS President was not only a member of the Hungarian parliament for the MSZP (The Hungarian Socialist Party and successor to the Communist Party) - and thereby somewhat undermining its claim to party political neutrality - but also one of MSZOSZ's representatives on the Council for the Reconciliation of Interests (CRI) (see above).

In the course of the socio-economic changes in Hungary VASAS, along with other unions, was confined to reforming itself and playing a part in establishing the new basis of trade unionism (such as disputes over property). Thus prior to the introduction of the Labour Code in 1992 (see above) the union played a minimal role in attempting to defend the interests of its members. The exceptions were at the very prominent visible state owned enterprises such as IKARUS and Dunafer where the continuity in personnel delegated from such firms permitted the union to continue to play its traditional collaborative role with management. As a result the old alliances between management and trade union officials continued which postponed the transformation of enterprises (see chapter 6). However, the weakness of the union elsewhere, particularly in the smaller firms, indicated its inability to adapt to the new circumstances. This was in large part due to the union's organisation as a federation of local unions. The local unions were unable to cope with the rapid changes in firms as they were reorganised and privatised and VASAS was unable to keep track of all

the developments let alone establish strategies to try to counter them. Just as the break up of the plan cast enterprises adrift, so too were union's headquarters removed from developments in workplaces. The result was that VASAS was like a 'hollowed out' union with a headquarters without an organisation.

The union's membership fell from a peak of 500,000 in the early 1980s to 200,000 (of which 40pc were not active in the workforce either because of age/health or unemployment) in mid-1993. This meant that union density in the industry, according to VASAS, fell from 85pc to 62pc[33] (see Table 4.10). However, as the number of grass root members decreased the number of affiliated local unions increased. Thus the metallurgy branch increased to 37 local unions and the vehicle manufacturing branch increased from eight to 33 in the course of the early 1990s. However, these figures have to be treated with some caution. In the majority of cases the new affiliates did not represent the establishment of new unions in new enterprises but reflected the subdivision of existing enterprises and their local unions. Thus RABA, the engine and axle maker, transformed itself into a holding company in 1993 with 21 subsidiaries and divisions, each one with its own local union. In this way privatisation and the restructuring of state owned enterprises diluted workers' solidarity and the influence of local trade unions.

The reduction of union membership was partly due to having lost its monopolistic position to represent metalworkers in the late 1980s. As a result the

33 This is almost certainly a considerable over estimation since it does not include those greenfield factories set up by foreign investors in the engineering sector which were in mid-1993 mostly non-unionised.

Federation of Workers' Councils (MSOZ) and League of independent trade unions (LIGA) gained some members in the industry. However, they remained relatively insignificant registering between them just 10.33pc of the vote for works councils in May 1993 (see Table 4.11). Far more important in causing VASAS's membership to fall was the high level of redundancies in the industry in general, however some branches were particularly affected. One of the worst hit branches was agricultural machinery, whose membership fell from 17,000 in the late 1980s to 3,200 in mid-1993. The trade union also suffered from being associated with the soviet backed regime despite the fact that the unions embarked on a substantial public relations campaign designed to emphasise the dissident role they had played under the old system. The result was that once managements stopped deducting union fees prior to distributing wages many workers failed to renew their membership. The growth of short-time and part time working in the industry also helped to reduce union membership. In addition, whereas VASAS membership had included workers and managers, in the course of the changes many middle management white collar members left as those who remained in employment were well rewarded (as pay differential were increased (see chapter 6)) and began to identify themselves as employers rather than employees. However, this process also reflected VASAS's connivance in the system which undermined the authority of white collar workers.

Having spent much of the time defending its existence VASAS then began to establish a tentative campaign strategy, in part in response to the introduction of the Labour Code. The union wrote a 32 point code of aims and objectives for the medium term. The union's highest priority was to train representatives and to assist in this task

it entered into a co-operation agreement with IG Metall, its counterpart in Germany. Based on German finance and expertise the union drew up a plan to place 10,000 representatives on training programmes ranging from one day to two weeks. In addition to language training courses - to enable union officials and representatives to negotiate directly with foreign managers - the training was to cover economic, industrial, labour and political education, financial issues, and health and safety at work. Despite being geared to enable representatives to adapt to the new circumstances, an indication of the sort of training envisaged was provided by the fact that it was to be led by a former director of an enterprise 'belonging to this union'. However, a indication of the size of the task that faced the union was that it could only afford a pilot training scheme in one county.

The training programme was a response to the challenge posed by the introduction of the Labour Code. The establishment of works councils implied a redefinition of the role of local affiliated unions. It thus offered the union an opportunity to establish itself in the new institutions but also the danger that the works councils would result in the marginalisation of the trade union, even though they remained the agent of bargaining. For the union therefore it was essential to develop links with the works councils. The first elections for the works councils were held in May 1993. In those elections VASAS won 655,921 votes or 85.16 pc of the vote whilst its opponents won only 14.39pc in the engineering and metallurgy industry (see Table 4.11; Map 4.3). This meant that 92pc of the works councillors that were elected were members of VASAS. Still more were members of the Federation of Workers Councils or LIGA. Whilst the exact figure was unavailable the first round of works

councils elections resulted in a very strong link between the unions and the councils, at least in the engineering industry, in which very few works councillors were not members of one union or another. With such dominance VASAS was in a good position to negotiate collective agreements with employers. To facilitate that VASAS head office drew up a standard collective agreement that it intended to use as its bargaining position in negotiations. The model agreement, drawn up with the assistance of IGM, was based upon Germany's system of co-determination and sought to give more participative rights to works councils and greater benefits than permitted by the Labour Code. A major strategy was to develop further its links with counterpart unions in western Europe, including the AEEU in the UK and IGM. VASAS hoped that the Labour Code and moves towards pan-EU bargaining in the west European automotive industry would assist it in rapidly raising the standard of bargaining and workers benefits in Hungary.

Crucially, the future of industrial relations in the engineering industry in Hungary depended on the relationship between VASAS and the works councils. In the months following the works council elections both unions and councils began to learn to use the new rules but much confusion remained. For example, the union was some way from establishing a clear division of responsibilities between itself and the works councils, particularly in the field of redundancies and health and safety issues.

Despite the introduction of the Labour Code, which made management responsible for informing employees (via the works council) about important business matter, employees remained largely excluded from debates over privatisation. For

VASAS two issues surrounding privatisation were especially important. The first concerned the lack of employee consultation in the development of privatisation plans. As a result the union organised a series of meetings with the State Property Agency (SPA) and the relevant government ministries to demand workers be given a bigger say in the privatisation of their enterprises. As the level of interest in state owned enterprises declined, the majority of engineering enterprises considered Employee Stock Ownership Plans (ESOP) as the only means of joining the private sector. On the face of it such schemes seemed to offer employees the opportunity to play a new role in the enterprise and possibly act as a vehicle for VASAS to develop a more influential relationship with management. However, the impact of ESOPs on trade union bargaining remained to be seen. Early examples of ESOPs in the automotive component sector, such as Perion Battery Company and Armafilt (both located in Budapest), suggested that ESOPs were unlikely to increase the influence of employees or the union in bargaining. The second issue centred on the impact of privatisation on existing collective agreements. The union struggled to maintain the terms and conditions of employment offered by existing agreements following privatisation but faced pressure from incoming managements which tried to terminate them. In some instances the union resorted to strike action to support existing collective agreements. The disputes frequently focused on working hours with managers often seeking to place employees on short-time or part time contracts. As well as undermining employees' bargaining position (it was often the prelude to redundancies) it undermined the union's efforts to retain members.

VASAS had a twin strategy to preserve and extend unionisation in the automotive industry. It sought first to maintain its position in the traditional state owned enterprises, such as IKARUS and RABA, and second to attempt to mobilise workers in the new 'greenfield' foreign owned facilities. The union successfully concluded a significant collective agreement with IKARUS's management which was seen as a success for the union because it contained terms and conditions which considerably exceeded the minimum standards contained in the Labour Code (see chapter 6). Whereas the IKARUS management and union formed a coalition, at RABA the union was far less successful in maintaining its previously strong position in the face of an aggressive and hostile management. Significantly, the management at RABA had successfully distanced the local union, which increasingly showed willingness to co-operate with management's restructuring plans, from VASAS which argued that management was attempting to undermine the power of employees and their representatives in the enterprise. Thus once the strength of the union had been reduced RABA's management terminated the existing generous collective agreements. Of particular concern to VASAS was the gradual separation of the local unions from head office. This was reflected in RABA's employees maintaining their local union membership whilst failing to renew their membership of the national organisation. The prospect of management driving wedges between local unions and VASAS clearly had significant implications for trade unionism in the state owned industry.

In the course of 1993 VASAS embarked on a concerted effort to develop links with the new workforces at the newly constructed 'greenfield' foreign owned factories. As a result the union organised a conference of labour representatives from the

automotive sector to plan their mobilisation strategy. VASAS was most successful in developing links with workers at GM Europe's plant at Szentgotthárd where a local union was formed in late 1992 (see above). By mid-1993 the local union remained outside VASAS's federation but management had permitted VASAS officials to develop links with local leaders within the plant. Elsewhere, the union was hampered by hostile management. Not least, the management of Suzuki, despite entering into negotiations with VASAS, tried very hard to prevent the recognition and growth of a small local union (see chapter 6). The union's success in mobilising workforces at the component factories was equally mixed. The union was most successful at Kromberg-Schubert Kft (Kurszeg), a wiring harness factory supplying Mercedes Benz, where a local union rapidly recruited 20pc of the 500 strong female workforce and quickly affiliated to VASAS. At another wiring harness plant, Packard Electric (a subsidiary of GM) (Szombathely) VASAS were permitted to make a presentation to the workers at the plant after some employees contacted the local VASAS official. By mid-1993 a local union had been established, with the assistance of VASAS and a union at a sister Packard Electric plant in Borgalu, just over the Austrian border. With 80pc of the workforce as members, VASAS succeeded in forcing the management to replace the existing individual contracts with a collective agreement[34]. However, management at United Technologies Automotive's (UTA) wire harness factory (Gödöllö) and at Ford's plant (Székesfehévár) refused to permit the union even to make a presentation to the employees (see chapter 6). Elsewhere, at Michels Kabel (Mór) for instance, the union had yet to make any attempts to organise the workforce.

[34] Where the union was able to defend employee interests' replacing individual contracts with a collective one was the uppermost priority. Other important issues included pay levels and overtime.

Where the union sought recognition its first aim lay in replacing individual with collective contracts and only secondly was it concerned with pay.

By mid-1993 VASAS had had mixed success in establishing a presence in the new foreign owned automotive plants. Not least, it still had some way to go to create an effective basis for trade unionism at Suzuki and to a lesser extent GM Europe. However, the prospect of union recognition at GM Europe's plant raised the possibility of VASAS becoming linked into the valuable GM international trade union network. But in trying to win recognition the union provided a significant indication of the likely role it would play in the future. In its dealing not only with GM Europe's management but also others, such as Suzuki, VASAS leaders stressed that recognition of the union and the conclusion of a collective agreement would make the staging of collective labour disputes much harder and would reduce the level of unofficial 'lightning' strikes[35]. Thus as part of institutionalising labour interest the union held out the possibility of being able to control it for the benefit of employers. Overall the development of the union in the domestically and foreign owned automotive sector stood very much at a cross roads. Not least the Labour Code posed both opportunities and threats to VASAS. Thus VASAS officials argued that the code could permit the union considerable influence but at the expense of weak works councils, the very institutions the union had to depend upon to organise local branch organisations to enable it to win sufficient local support to permit it to negotiate collective agreements. There was thus a feeling in the union that the Labour Code placed the burden of

[35] The Strike Code (1989) made labour disputes against a collective agreement between management and employees illegal.

organising and articulating worker interests on trade unions which had yet to re-establish themselves in the new circumstances.

Thus VASAS's future influence depended on the outcome of individual conflicts between the union, employees (as represented in the works council) and management. As there was just as much chance of individual works councils siding with management as opposed to the union, VASAS's immediate task was to develop firm links with works councillors. Their election in May 1993 seemed to indicate such a development was possible but it required the union to turn itself into an effective organisation in order to articulate employee interests. However, the union's federal structure, lack of a national organisation, and indications that its officers had retained the old mentality, symbolised in describing enterprises as 'belonging to the union', suggested that the union might lack the necessary resources to turn its position into one of real influence. It remained to be seen whether the Labour Code would institutionalise a German style industrial relations system in the automotive industry or whether a 'hollowed out' version in which the union was marginalised and works councils collaborated with management would develop.

IG Metall in eastern Germany

Whereas there was institutional continuity in the form of trade unionism in the Hungarian auto industry, in the former GDR there was discontinuity as the former organisation was dissolved and replaced by a west German union. On 6th December 1989 IGM signed a co-operation agreement with its counterpart in the GDR, IG Metall (Ost)[36]. Underlying the initial contact was IGM 's wish to ensure that effective

trade unionism developed in the engineering industry in eastern Germany. The two unions agreed to co-operate in the field of training and to co-ordinate their bargaining strategy. In addition, IGM encouraged twinning agreements between individual plants in the old and new Länder. This co-operation culminated in the unions presenting a joint draft proposal to the GDR government concerning the privatisation and subsequent corporate governance of state-owned firms which went beyond the West German Works Constitution Act (see Der Bundesminister für Arbeit und Sozialordnung 1990). In it the two unions argued that manufacturing firms be privatised by transferring 75pc of the enterprise's capital to the employees and the remaining 25pc to the THA (see above). The plan also involved the implementation of a co-determination corporate governance system comprising a supervisory board with an equal number of employee and external shareholder representatives and a worker director[37]. Although the joint proposal had little influence in shaping privatisation policies it paved the way for IGM effectively to take over IGMO as German integration proceeded apace.

By May 1990 IGM had set up eight advisory offices in the new Länder, staffed primarily by westerners. In July 1990, shortly after monetary union, the two unions agreed to dissolve IGMO and transfer its members to IGM. This change was enacted on 1st January 1991. IGMO was liquidated and its officials were made redundant but former SED members (who could demonstrate that they had not had links with the STASI) were free to join and represent IGM. To symbolise the discontinuity IGMO

36 This account heavily relies on reports in the monthly *European Industrial Relations Review.*

37 This proposal was drawn up with reference to VEB Robotron (the GDR's manufacturer of household goods) which was subsequently sold by the THA to Siemens which reduced the workforce from 68,000 to 15,000.

members had to reregister their membership of IGM." As a result some 1.1 million of 1.6m IGMO members joined IGM. However, by the end of 1991 IGM membership had fallen in east and west Germany as the recession proceeded but even so the union's membership increased almost overnight from 2.7 million to 3.6 million making it easily Europe's largest trade union. In December 1991 there were 944,082 members of IGM in the new Länder. However by the end of 1992 the figure had fallen by 13,000 largely owning to deindustrialisation (*European Industrial Relations Review*, March 1992, 6). In total IGM set up 34 local offices[38] in the new Länder, established a new region (Dresden) and enlarged other west German regions, including West Berlin to include east Berlin and Brandenburg, to include the other east German Länder[39]. To assist in the establishment of the local branches IGM manipulated the election for local office leaders by planting westerners (those that had worked in the advisory offices) and campaigning that the easterners should vote for them. After the elections the westerners were elected in all offices although there were problems in one office where the easterners objected to IGM's strategy.

As IGM established itself in the new Länder the BGLs and BGOs in automotive enterprises were dissolved and replaced by works councils. Despite the institutional changes, in many enterprises the personnel on the new councils were the very same people who sat on the BGL and in some cases the chair of the BGL was reinvented as the chair of the works council (see Jürgens *et al.* 1993). Thus IGM

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38 In many cases the offices were established in buildings which IGM had occupied until 1933 when the incoming NAZI regime confiscated them. At the end of the second world war the Soviet army authorities set up a new trade union in them, such as IGMO. However, the question over the distribution of property belonging to FDGB and its unions, including IGMO, was very controvertsial and had not been resolved by the end of 1994.

39 As a result of the changes the Berlin office became responsible for two tariff regions, west Berlin which was linked to west German bargaining and east Berlin/Brandenburg linked to the east.

sought to develop links with the new councils. Whereas there were no official figures it was widely believed that the majority of works councillors elected in the engineering industry after October 1990 were members of IGM. IGM set up training programmes to educate the councillors in the workings of the new legal environment. IGM sent key individuals to one of its six training centres (all in the old Länder) who were subsequently sent into enterprises to talk to workers on the shopfloor and to organise shop stewards. However, even where works councils were rapidly established their influence remained limited in the face of the economic crisis that the majority of firms faced. As a result councils soon found themselves co-managing their firm's decline. Elsewhere, the continual break-up of firms by the THA, creating smaller and smaller works councils, resulted in the weakening of employee power.

At the same time the employers organisational structure was also transplanted into eastern Germany. Following the disintegration of the state-led system a number of metalworkers employers' associations were established in the GDR which covered the majority of the 1.4m engineering workers in the country. In May 1990 these associations signed a co-operation agreement with their West German equivalent, Gesamtmetall, which aimed to prepare them for their accession to Gesamtmetall. This allowed Gesamtmetall to play a significant role in the establishment of industrial relations in the new Länder. Later in that year Gesamtmetall used the pretext of unifying the industrial relations system to argue that nation-wide collective agreements would not be possible in a united Germany and that the employers would pursue a differentiated bargaining policy. In September 1990, crucially after the first generous collective agreement in the east German engineering industry had been

negotiated (see below), Gesamtmetall became the first employers' association to admit east German regional employers' associations. To support the establishment of Gesamtmetall in the new Länder, the THA directed all of its firms to join.

Following monetary union, negotiations to establish the institutional basis of a new collective bargaining system began. Initially, the talks were held between the GDR's IGMO and the engineering industry's employer associations which delineated the bargaining regions (the five Länder), and proceeded to harmonise the system with that of West Germany. To assist with this the five bargaining regions in the east were 'twinned' with five in the west[40]. At the same time IGMO, backed by IGM, submitted a series of demands from which to begin to negotiate the east's first interim collective agreement. These included a DM400 monthly pay increase to take manual workers' pay in the east to 65pc of equivalent workers in the west, basic holiday entitlement of 20 working days, a two-year employment guarantee and a 40 hour week. After several months of negotiation an agreement was reached. As part of the agreement wages were increased by up to DM250 per month (taking pay to 62pc of that in the west) and employers agreed not to implement redundancies until July 1991[41]. The other two demands, working time and holiday entitlement were agreed. IGM indicated satisfaction with the agreement but Gesamtmetall and government representatives feared increasing wages far above productivity gains would hinder the region's recovery.

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40 Thus east Berlin/Brandenburg were twinned with west Berlin, Mecklenburg Vorpommern was linked to Schleswig, Saxony with Bavaria, Saxony-Anhalt with Lower Saxony, and Thürigen was twinned with Hessen.

41 However, owing to the short-time working compensation scheme (see Auer *et al.* 1992) workers were allowed to be put on zero-hours but still entitled to 90pc of their normal pay (and employers were exempt from paying social security contributions for them). Thus unemployment was merely hidden.

In 1991 the interim collective agreement was replaced by a three year agreement which was to increase metalworkers wages in the new Länder to the level enjoyed in west Germany by 1994[42]. The agreement was based on political rather than economic considerations (such as productivity) and was particularly designed to dissuade workers from moving to western Germany to find higher paid work. Despite the move to parity pay, real wages remained lower in the east as the working week was to remain at 40 hours (declining to 39 in 1994 and 38 in 1996) compared to the planned 35 hours in the west. Also, paid holidays in the new Länder were only gradually to increase from 20 to 30 days per year (the same as in the west) in 1996. As a result workers in east Germany had to work around 272 hours a year more than workers in west Germany for considerably less pay. Even so at the time of the agreement the Bundesbank and the government complained that the agreement undermined east Germany's competitiveness. However, even after the pay increase in April 1991, the DGB estimated that east German engineering workers were paid 40pc of that in the west (when all benefits were taken into account) (*European Industrial Relations Review*, September 1991).

Controversy surrounded the 1991 agreement but it did not become an issue until late 1992. As part of the collective agreement pay increases in April 1993 were due to be 26pc to bring wages up to 82pc of the figure in the west. However, if all elements of workers' remuneration were included in the calculations the 1993 pay

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[42] Given the course of subsequent events, it was significant that Gesamtmetall initially sought a 12 month contract (as is the norm) before it argued that a three year tariff would permit greater stability given the nature of the economic situation in the region.

increase would have increased wage costs in Saxony to 56.5pc of those in its twinned bargaining region, Bavaria (Bispinck 1993, 326). Despite that, Gesamtmetall demanded a renegotiation of the agreement which IGM rejected arguing that east Germans could not put up with 'socialist wages and capitalist prices' (*European Industrial Relations Review*, March 1993, 8). Negotiations took place in early 1993 but they broke down without agreement. In the meantime the engineering employers' federation in Saxony (where the majority of the automotive industry is located) terminated the agreement - the first time such an event had happened since 1928[43]. In the course of these events the THA had played an important role. At the time the THA still owned companies which employed 20pc of the 450,000 workers in the engineering industry in the Länder with the result that its directive to its firms not to pay more than a 9pc increase had a big impact on the dispute. In addition, one of the voices pushing hardest for a renegotiation of the tariff was a director of the THA who also sat on Gesamtmetall's board.

The termination by Gesamtmetall of the collective agreement in Saxony was a turning point in the dispute. IGM claimed that the move was illegal whilst the employers claimed it was a special situation because no one had foreseen the recession in east and west Germany when the agreement had been concluded. Thus the employers argued that they could only afford a 9pc wage increase, compared to a 26pc increase stipulated in the agreement, because unit labour costs were 40pc higher than in west Germany. In turn IGM argued that unit labour costs had fallen from 179pc of western levels in 1991 to 123pc by the end of 1992. Significantly,

[43] Late in 1993 Gesamtmetall also symbolically terminated the collective agreement in west Germany.

Gesamtmetall also demanded that in the renegotiated agreements so-called 'hardship clauses' should be included which allowed firms threatened with closure to pay under the agreed pay rates for a specified period of time.

More than anything else the course of action pursued by Gesamtmetall illustrated the strains on its own organisation, which in turn threatened the industrial relations system. Following the 1991 agreement dissent within Gesamtmetall developed. Smaller employers were particularly angered by the larger ones, which were unwilling to challenge IGM and agreed to politically motivated wage agreements which placed smaller employers in considerable financial difficulty. Once the German economy entered recession concern became even more widespread. As a result the leader of Gesamtmetall was replaced by someone more amenable to the interests of the *Mittelstand* (small and medium sized enterprises). However, Gesamtmetall continued to be split in the course of the dispute over the 1991 accord given that some employers indicated willingness to abide. Perhaps more significantly Gesamtmetall's coverage in eastern Germany was challenged. Even from the outset the proportion of employers in the engineering industry in the east that became members of Gesamtmetall was much lower than in the west. It was estimated that less than half of all engineering employers in the new Länder were members of Gesamtmetall compared with over 70pc in western Germany (*Economist* 21 May 1994). This prompted suggestions that Gesamtmetall's regional organisations in the new Länder were not representative of the region's employers (see Ettl and Wiesenthal 1994). Moreover, as the recession proceeded more and more employers left Gesamtmetall as a way of avoiding the collective agreement, even though they were

unable to pay below the tariff rate for 12 months after leaving. There was thus a growing trend amongst employers to move away from regional contracts towards plant based ones. The most important example of this sort of agreement was at GM Europe's automobile assembly plant in Eisenach where pay levels were not linked to the regional tariff[44].

The dissolution of the tariff contract led to a series of warning strikes in Saxony in early May 1993 and later a 12 day strike, the first legal strike in the region for 50 years. In total the official strike strategically targeted 44 different enterprises, employing between 50 and 2,000 workers each and some 25,000 in total. In the light of the THA's role in the dispute IGM focused its strikes on firms which remained owned by the THA but also included some private companies, including, for example, VV Sachsen GmbH (see chapter 6). An agreement was finally reached between IGM and Gesamtmetall in Saxony, which subsequently became the basis of agreements in the other Länder. As part of the agreement planned wage increases were reduced which meant that parity pay would only be reached in July 1996 (rather than April 1994). The reduction of working hours and the increase of holiday entitlement were also delayed. Thus the 26pc increase in April 1993 was replaced by a increase of 15pc in July 1993[45], plus two subsequent increments taking total pay increases in the course of 1993 to 21.7pc. By July 1994 wages in the industry had risen to 87pc of those in the west and in July 1995 had increased once again to 94pc. The agreement also permitted renegotiation of the date at which parity would be reached within a period of 6 months either way of the planned date.

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44 The plant at Eisenach was a subsidiary of GM Europe and not its German subsidiary Opel AG.

45 This compared to a 3.5pc pay increase in the metal industry in the west in 1993.

The final element of the agreement was the 'hardship clause' which permitted firms that faced bankruptcy because of the pay increases to pay wages below those stipulated in the collective agreement for a specified period of time not greater than 24 months. However, before the clause could be enacted the union and Gesamtmetall had to examine each individual case closely, including looking at items of corporate strategy beyond wages, before agreeing. Where firms were permitted to follow this course of action they were forced to pay back the money owed to their employees over an agreed period of time. Thus IGM demonstrated to its eastern members, some of whom began to see IGM destroying jobs, its willingness to be flexible to achieve its goal of preserving east Germany's industry and its members jobs. In the face of criticism from members in the west that the clause would undermine the labour relations system, IGM likened the procedure to granting the company a short term credit whilst its finances recovered. In this way the 'hardship clause' more than anything else indicated the tensions implicit in a single union and industrial relations system operating in two very different economic and social spaces. Thus the industrial relations system in the automotive industry in eastern Germany was under considerable pressure.

The application of the hardship clause varied from regime to regime. In the case of the IGM Berlin/Brandenburg office 80 firms approached the union for permission to enact the 'hardship clause'. After examining the cases the union rejected 70 of them without negotiation. With the other ten the office entered into negotiations with employers but in the end none of them proceeded with under-tariff payment.

However, other IGM offices were not as tough and were more willing to accept management's demands. Thus whilst there were no official figures it was widely believed that the Dresden office, covering Saxony and including the majority of the east German automotive industry, had permitted between 20 and 25 firms to enact the 'hardship clause'. In three cases the union had not even succeeded in ensuring that there was a 'payback clause' in the agreements.

In addition, IGM also campaigned for a different set of policies than those pursued by the government and the THA. In particular, motivated by the transformation of the former GDR from a production to a consumption-led economy, the union sought to preserve the region's 'industrial cores' (see above). IGM supported the continuation of a reduced state owned sector arguing that continuing to pay subsidies was preferable than paying workers to be unemployed. In particular, IGM argued for the creation of employment (qualification) companies to prevent surplus labour from becoming unemployed, instead retraining them for future jobs (see also Chapter 6). After negotiations the THA and government decided to back their formation. By June 1991 there were 150 employment companies but subsequent attempts to set more up were blocked by the THA. However, the employment companies were undermined by the absence of jobs for the trainees once their period of training had been completed.

The pace of industrial change, and the sheer number of firms either liquidated or under the threat of being so, made it very difficult for the union to defend its members' interests[46]. In addition, employers pursued strategies designed to avoid the

terms and conditions in the tariff agreement. Whereas some employers left Gesamtmetall altogether some simply refused to pay the tariff agreements. Where there were no IGM members in the enterprise or where they failed to bring it to the attention of the local IGM office, the union was powerless to do anything to alter the situation. Elsewhere, works councils, some of which were dominated by IGM members, entered into plant based agreements with management which often involved the firm giving some form of employment security guarantee in return for the workers accepting a level of pay beneath the tariff agreement. The industrial relations system in the east was also undermined by the preponderance of subsidiaries located in the region which were connected to western bargaining regions. Thus many firms in the new Länder were not bound by the tariff negotiations in eastern Germany.

Whereas IGM successfully established a presence in eastern Germany it also generated some resistance from its own members. Not least members in the east were disappointed at IGM's inability to win its demands in negotiations with Gesamtmetall and prevent redundancies. This led one east German worker to say: 'I think IG Metall is happy that German industry can profit from the East's lower wages' (quoted in TIE 1991). The result was that in a large number of instances members embarked on unofficial lightning strikes which placed IGM in an illegal position[47]. IGM's strike strategy in May 1993 also created problems because although it was based on targeting particular firms, strikes took place in firms where they should not have done. The result was that there were occasions where IGM representatives breached the law

[46] In particular the large number of privatisations by the THA via the vehicle of management buyouts (MBOs) created a large number of poorly financed firms teetering on the brink of bankruptcy.

[47] The West German labour law transplanted into the new Länder enforced a lengthy period - up to six months - of procedures that had to be activated before strike action was legally permissible.

and were taken to court. In such circumstances the union had to back the employer's legal case against that of its members. This created a lot of criticism from the membership.

The pressure that unification put on the industrial relations system permitted management to experiment with innovative forms of labour organisation which had important implications for trade unionism in the automotive sector (see chapter 6). The absence of a tradition in the west German style of bargaining within firms encouraged management continuously to test and extend the boundaries of acceptable management practice. In the field of employee representation employers were much less willing to grant works councils and shop stewards time and resources to fulfil their responsibilities. In addition, management sought to gain more control by reducing the influence of works councils over the crucial issues of manning levels and work intensity. Often such strategies accompanied the introduction of elements of 'lean production' and team working and outsourcing in particular (see chapter 2). Thus the adoption of team working had important implications for IGM and the role of works councils and shop stewards. Also the growth of outsourcing raised the prospect of the de-unionisation of the industry by stealth as value adding processes became subcontracted to un-unionised suppliers.

Thus the unionisation of the automotive industry in the new Länder was secured by IGM's move into eastern Europe. However in the course of doing so the industrial relations system was undermined (see Sadowski *et al.* 1994); the union faced problems and management secured a more dominant position than in western

Germany. Thus the east German automotive industry had the same institutional set up to that in the western part of the country but the different circumstances meant that the institutions worked in a different way. For some there was a 'representation deficit' in the procedure which led in a high wage strategy which undermined the new Länder's competitiveness (Ettl and Wiesenthal 1994). For others the system led to the erosion of co-determination and the influence of IGM. This was due to the de-industrialisation of eastern Germany and the reduction of trade union membership; in just the first six months of 1993 IGM lost 75,000 members taking its membership to 680,000. Trade unionism in the auto industry had been established but its future remained in doubt.

4.6 Conclusions

In the course of the late 1980s and early 1990s the regulation and governance of the automotive industry in Hungary and eastern Germany was transformed. Two significant points arise from this examination. First, the legacies of the soviet automotive industry and the different way in which they were organised in the two countries were crucial in shaping the industry's development. Thus the relatively loosely organised industrial structure in Hungary contrasted greatly with the tight system in East Germany. Second, although the state played a significant role in both countries, the different legacies helped to shape two contrasting paths of transformation. Change in Hungary was gradual and evolutionary owing largely to a weak state being unable to pursue rapid privatisation nor embark on widespread co-ordinated industrial restructuring. As a result the auto industry survived but was only slowly privatised. The inability to find new owners forced the government to

reintroduce some forms of industrial policy other than simple privatisation. In contrast, change in east Germany was statist and rapid, owing to the legacy of the centralised GDR state and the power of the West German state. As a result the auto industry was privatised but in the course of being so was effectively closed and restarted from scratch based on significant investment from west Germany. Thus the effect of the disintegration of the plan and the marketisation of relations between producers and consumers was in the case of Hungary to leave producers adrift and in east Germany to close them down and force them to compete for (mostly) west German investment and custom.

At the same time the state not only played a significant role in creating a market for automobiles - in which demand for cars such as the Trabant fell precipitously - but also in shaping and responding to the transforming social basis of production. Both in Hungary and east Germany the state played an important role in the establishment of new mechanisms for managing labour relations which in the context of deindustrialisation and unemployment contributed to the weakening of labour. In Hungary trade unions were slow to *adapt* to the new market environment but the evolutionary pace (and state intervention) of change protected employees from more severe effects of marketisation. Crucially, trade unions were party to the changes to the system and in this sense were represented. However, it remained to be seen how effective trade unions would become in the workplace. In contrast in east Germany a system of labour relations was *adopted* wholesale which resulted in the establishment of apparently strong trade union institutions. However, these did not

seem able to defend its members very well and threatened the German industrial relations model.

Table 4.1 Exchange ratio of Ikarus buses against different cars of CMEA origin, 1980-88

IKARUS 280 compared to	1980	1985	1986	1987	1988
SKODA 120L	36.3	32.4	31.4	31.4	28.5
P. Fiat 125	26.7	27.6	27.5	27.6	26.6
Trabant	56.5	48.9	46	47.7	47.9
Wartburg	38.4	35.2	35.4	35.9	35.4
Lada 2101	36.4	30.4	30.1	30.1	29.6

Source: Mogürt in Kapitany, 1992, 51.

Table 4.2 Hungarian vehicle production

Year	Trucks	Buses	Cars	Total
1981	1,323	13,559		14,882
1983	1,461	14,313		15,774
1984	1,279	14,341		15,620
1985	1,890	13,226		15,116
1986	1,833	13,586		15,419
1987	1,580	12,923		14,503
1988	2,063	12,350		14,413
1989	1,087	11,930		13,017
1990	1,000*	8,025		9,025
1991+	1,000	5,000		6,000
1992+	1,300	3,670	10,600	15,570
1993+		3,000	32,000	35,000
1994+		3,500	55,000	58,500
1995+		4,500	75,000	79,500

* estimate by Kapitány 1991

+ estimates by present author

Source(s): after Kapitány 1991:7; industrial sources

Table 4.3 The Hungarian transport equipment industry

	1980	1985	1990
No. of enterprises	43	125	416
Employment	104,300	95,000	63,700
Net sales (HUF m)	59,405	85,993	85,434
Exports (HUF m):			
rouble account	24,831	39,757	22,872
convertible	8,460	11,268	11,229
Gross value of fixed assets	37,295	46,001	57,603
Production			
multiple-unit trains	17	30	12
buses/coaches	14,032	13,226	8,025
trucks	1,608[+]	1,890[*]	1,000[*#]
bicycles	372,000	249,000	130,000

[#] estimate

Source(s): Ministry of Industry and Trade 1991a,33; [+] Kapitány and Kállay 1991; [*] Kapitány 1992

Table 4.4 Automobile production in east and west Germany

Year	East Germany		West Germany	
	(000s)	pc change	(000s)	pc change
1985	210		3,862	
1986	218	3.7	3,984	3.2
1987	217	-0.5	4,027	1.1
1988	nd		nd	
1989	217	0.0	4,125	2.4
1990	152	-30.1	4,197	1.7
1991	76	-50.0	4,011	-4.4
1992*	85	11.8		
1993*	170	100.0		

*Estimates

Source: VDA 1992a; VDA 1992b

Table 4.5 **Expected contracting and expanding industrial branches according to the Ministry of Industry and Trade 1993**

	1995	2000	2010
Contraction	Mining, metallurgy, textiles, timber processing	mining, casting, textiles	restructuring complete
Expansion	food processing equipment, car assembly, environmental protection pharmaceutical industry, construction, printing, plastic processing, textile-garment industry	food processing equipment, machine tools, automotive components industry, aftercare engineering, household appliances, non-consumer electronics, environmental protection, construction, printing, pharmaceuticals, fine-chemicals, textile-garments	biotechnology equipment, agricultural machinery, non-consumer electronics, aftercare engineering, vehicle industry, environmental protection, pharmaceutical industry, fine chemicals, garment industry, construction

Source: after Ministry of Industry and Trade 1993, table 5 and 6, 15.

Table 4.6 Companies covered by the Ministry of Industry and Trade's crisis management programme

Sector	Company
Mining	Mecsek Ore Mines
Metallurgy and steel industry	DV Group
Chemicals and pharmaceuticals	Borsodchem Nitrogen Works
Engineering	IKARUS + Csepel Auto RABA Ganz Engineering Works BHG Telecommunications Co VILATI Hungarian Atrification Bearing Works
Glass industry	Glass Industrial Works Pannonglas

Source: Kapitány 1993, Table 2, 5-6

Table 4.7 **Automobile ownership per 1000 of the population in Hungary, GDR and West Germany, 1960-1990**

Country	1960	1968	1970	1975	1977	1980	1985	1989	1990
Hungary	3	7.5	22	54	70	95	135	168	189
GDR	17				131			266	
West Germany		194	230	290		377	424		499

Sources: Kiss 1992, 15; Kortus and Kaczorowski 1981, 134; Pemberton 1991, 150.

Table 4.8 Passenger car sales in Hungary

Year	Units
1985	103,338
1986	117,709
1987	139,618
1988	128,212
1989	127,921
1990	205-215,000
1991	115-155,000*
1992	120-160,000*

Source(s): Kapitány and Kállay 1991; Kapitány 1992

Table 4.9 Trade union membership in Hungary 1990-1993 (estimates; thousands)

Trade Unions	end-1990	end-1991	mid-1993
MSZOSZ	2,683	2,000	1,300
Forum of Cooperation of Trade Unions (SZEF)	557	750	500
Autonomous Trade Unions (ASZOK)	374	350	400
League of Independent Trade Union (LIGA)	130	250-300	200
Federation of Workers' Councils (MOSZ)	106	45	120
Solidarity	75	150	nd
Association of Intellectual Workers (ESZT)	63	90	80
TOTAL	3,988	3,635-3,685	2,600

Notes: The figures for 1990 and 1991 were provided by the unions themselves (and must therefore be treated with some suspicion). Alternative estimates for 1991 are presented in Hughes (1991, 294) as follows: MSZOSZ 2-2.5million, LIGA 170,000, MOSZ 100,000 and Solidarity 50,000. The 1993 data are estimates by the ILO office in Budapest. All figures include members who are not necessarily active workers.

Sources: Borbély 1993, 2; ILO in *Business Central Europe* 1993, 23

Table 4.10 VASAS membership 1989-1993

Year	membership	pc in work	unionization in the sector (pc)
1989	500,000	66	85
1993	200,000	60	62

Source: VASAS

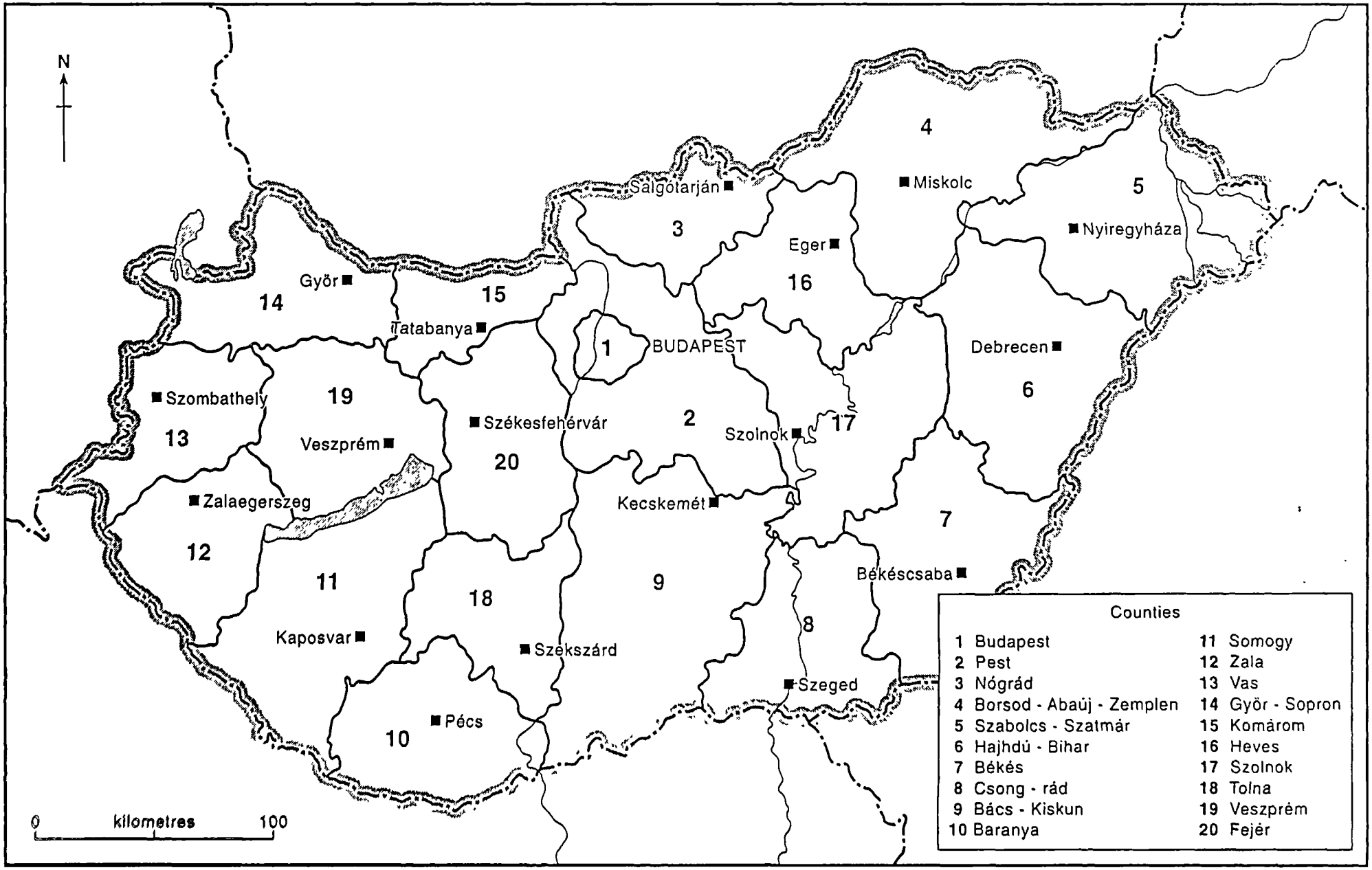
Table 4.11 **Results of the works councils elections in the engineering and metallurgy industry, May 1993**

Trade Union	votes	percentage
VASAS	655,921	85.16
Federation of Workers' Councils (MOSZ)	nd	5.17
LIGA	43,213	5.16
Others	nd	4.06

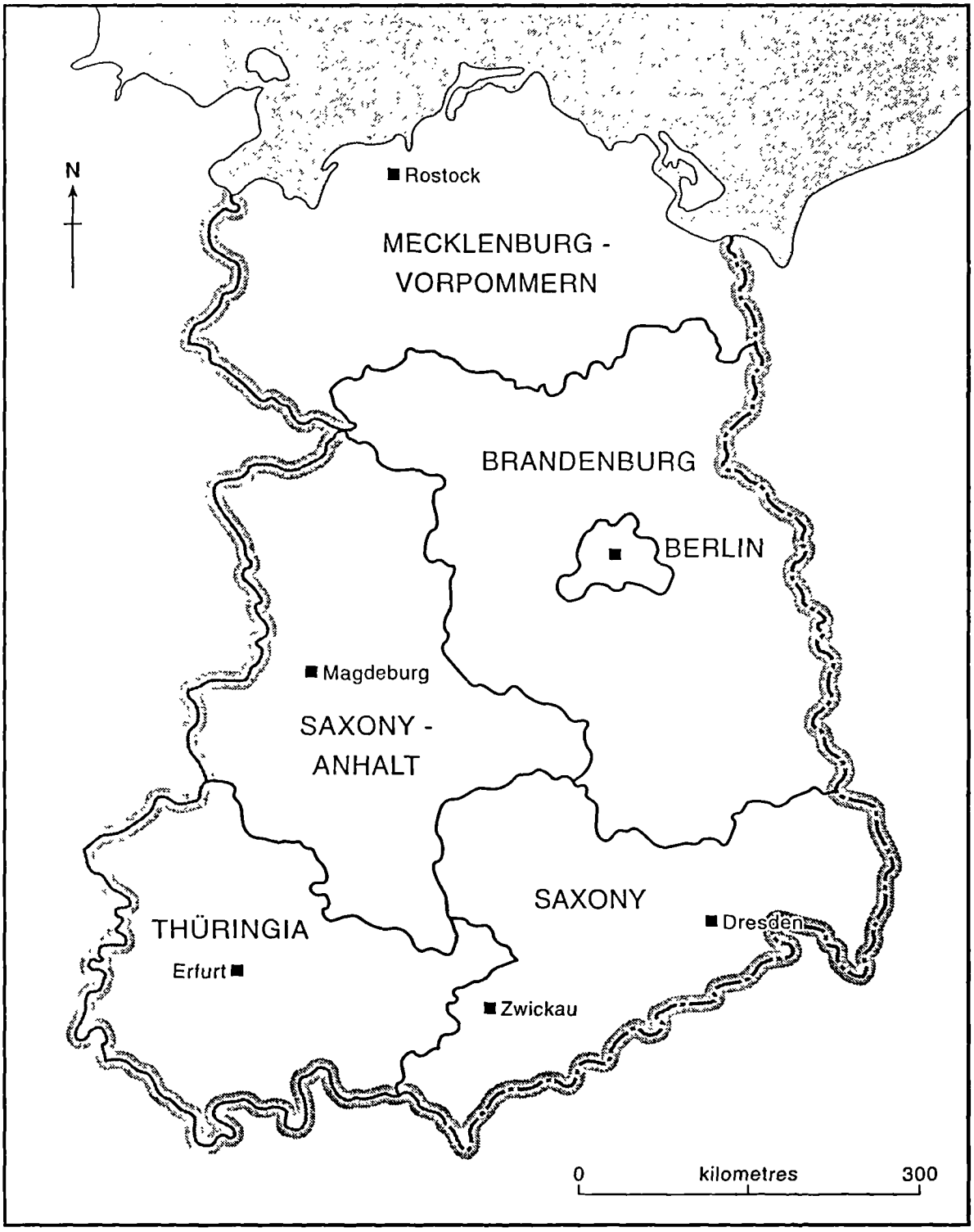
Notes: Assuming all VASAS members voted for the union's nominees, some 17pc of the votes cast for the union were by non-members.

Source: VASAS

Map 4.1 Settlements and counties in Hungary



Map 4.2 Settlements and Länder in east Germany



Map 4.3 VASAS share of the vote in the works council elections in the engineering and metallurgy industry by county, May 1993

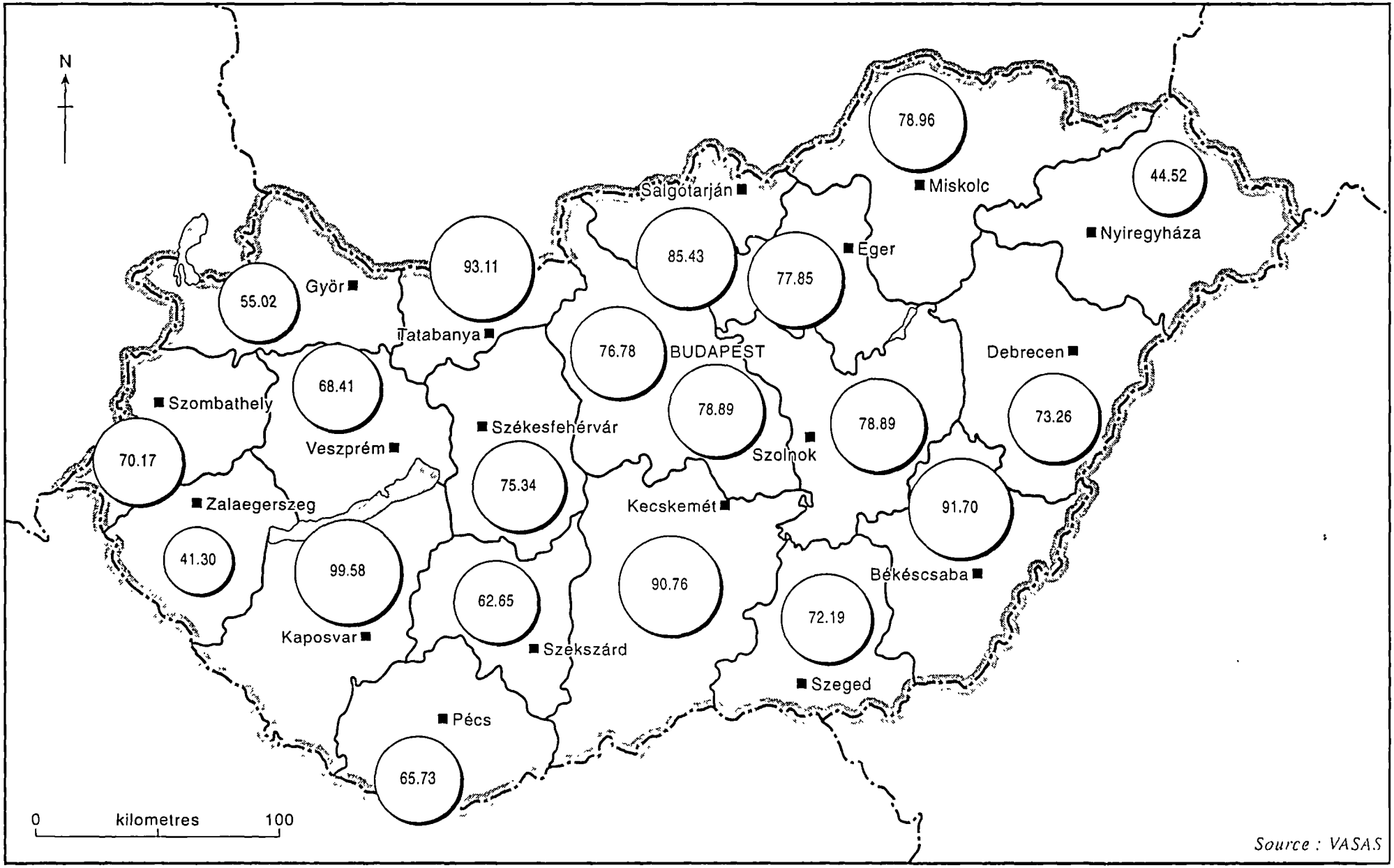
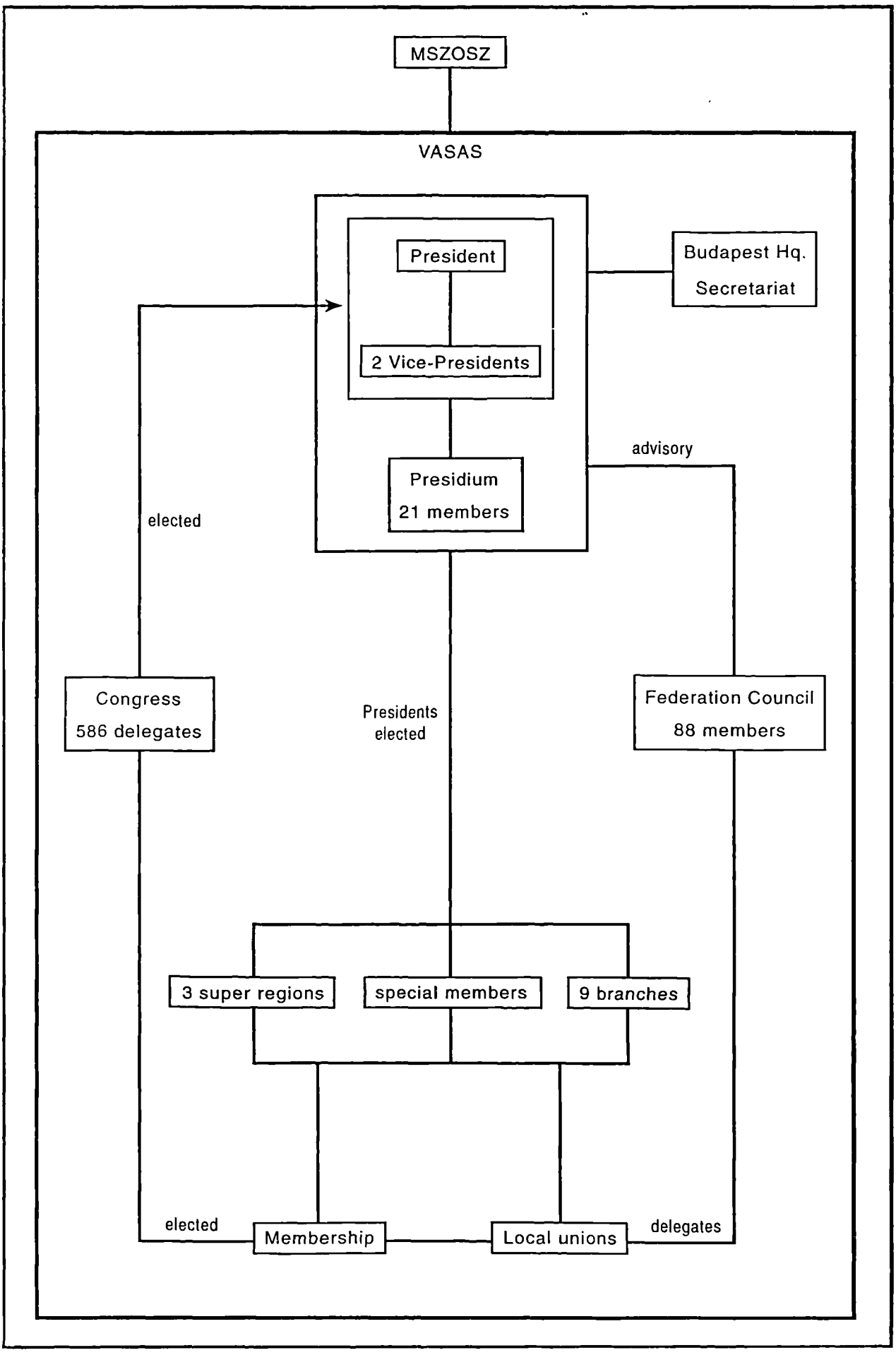


Figure 4.1 VASAS's organisational structure, 1993



Chapter 5 The transformation of production: automotive capital in Hungary and eastern Germany and the Hungârian and east German automotive industries

5.1 Introduction

The most significant process in the transformation of the auto industry in east and central Europe was 'marketisation'. An industry organised according to the soviet industrial model was transformed (in part) as new forms of governance and regulation were established. Central to this process was the subordination of production to the capitalist law of value as money was transformed from a currency of account (for the purpose of bureaucratic redistribution according to the state plan) to a currency of value (for the purpose of capital accumulation).

This chapter examines the transformation of production in the auto industry in Hungary and eastern Germany. This involves two issues: the process of 'marketisation' itself; and the strategies for capital accumulation subsequently employed by firms. Significantly the transformation of production differed between and within the two countries. In Hungary 'marketisation' involved 1) the transformation of state owned enterprises wedded to the plan into firms governed by the capitalist law of value and 2) the creation of new foreign owned companies as automotive DFI flowed into the country. By contrast, in east Germany 'marketisation' was far more dramatic as the sector was not so much transformed as closed down, and substituted by a 'foreign' one almost entirely dependent on west German capital.

First, the chapter examines the transformation of production in Hungary and east Germany as the planned industry broke up. Second, it investigates direct foreign

automotive investment in the two countries. In doing so it introduces six case studies four foreign investment projects and two indigenous producers. It considers the strategies employed by automotive firms, and focuses in particular on their regional development impacts since it is important to emphasise that the restructuring of the industry was shaped by and in turn helped to shape the development of regional-space economies. Thus the chapter concentrates on capital-capital relations by examining the extent to which the restructuring of the automotive industry altered the social and economic embeddedness of the industry and in doing so helped to shape the uneven development of capitalism and the generation of new patterns of uneven regional development.

5.2 The transformation of automotive production

As the 1980s proceeded it became increasingly apparent that economic stagnation was the consequence of inherent weakness in the soviet industrial model. The lack of mechanisms and institutions which could enable evolution or creative destruction, and more specifically the fusion of the economic and political realms, resulted in an economic system which not only failed to meet the expectations of populations and provide the political legitimacy which might have provided the opportunity to experiment with new forms of economic governance, but also precluded reforms which might have affected the very fabric of the system (see Altvater 1993). Crucially, this realisation occurred to different degrees and at different times across industries and countries resulting in forces for change that were beyond the control of any one set of authorities. The result was a complex transformation

which owed as much to the fact that reform was uncoordinated as it did to the changes themselves.

Towards the end of the 1980s the soviet industrial model was under severe pressure having failed to transform itself from an extensive to an intensive system of growth. Some of these tensions were particularly evident in the governance and production of the auto industry. Even before the mid-1980s there had been growing signs that the CMEA planning system was no longer satisfying the strategic requirement of individual state projects. Hungary in particular had gradually begun to pursue policies designed to loosen itself from the Soviet controlled economic system by entering into negotiations with Japanese car makers with the goal of giving Hungary a car making capacity and thus reducing its dependence on the plan (and in some ways increasing its stock in wider CMEA trade negotiations). East Germany too had failed to find a way of modernising its industry in conjunction with CMEA partners and was forced (for financial rather than technological reasons) to look for a western partner.

As uncoordinated measures to reform the economic system proceeded the result was to create even more increased irrationalities in the system. The complex commodity trading system began to generate anomalies as the Hungarian state began to liberalise prices before the customer (the USSR). Consequently the terms of trade altered in such manner as to squeeze Hungarian producers. Assembly became a loss-making activity since the prices agreed in bilateral commodity negotiations did not cover the cost of purchasing components locally (Kapitány and Kállay 1991). For

example, towards the end of the 1980s IKARUS, whose state subsidies had been reduced, suffered from the unwinding of the planning system which resulted in an increase of the cost of components, as price controls were lifted in Hungary, but the USSR was unable and unwilling to pay the increased cost of buses. In 1988 some 78pc of the price of an IKARUS bus was accounted for by the purchase of components with the result that the assembly process was uneconomic. Thus the international planning system depended on similar regulatory regimes being in place in constituent members. Once discrepancies in regulation occurred amongst CMEA members it led to an increasingly incoherent plan. The internationalisation of the auto industry and its considerable significance to domestic economies meant that the transformation of the auto sector had effects well beyond the confines of the industry.

The fall of the Berlin Wall and subsequent events completely reshaped the social landscape. The combination of lost markets, lost subsidies and import liberalisation disrupted economic systems. Most crucially however, the penetration of the capitalist law of value, initially through the creation of markets for consumer goods, implied an entire re-evaluation of the rationality behind economic activities. The result was that individual enterprises and production systems began to operate in different ways and ceased to abide by the state plan. The planning system collapsed from below and only subsequently did the CMEA abandon the plan as intra-CMEA trade was converted from being denominated in the rouble to being accounted in the dollar. This disrupted production systems, including the automotive sector, and led to the uneven deployment of market-inducing strategies by governments and firms. This resulted in the inability of customers to pay for inputs as prices rose towards world

market levels. Thus markets were not so much lost, in the conventional sense, as deprived of much needed products.

As the plan, and the informal networks which sustained it, were disrupted and money began to take a regulatory role, enterprises in Hungary and East Germany were forced to valorise capital, or in other words had to begin to consider money less as a measure of account and more as a representation of value and means of capital accumulation. The creation of capital thus depended on ascertaining the costs of production and relating prices to that figure. This involved relating wages to socially-necessary labour time. However, the submission of production to the law of the value was undermined by the disintegration of the plan. As the plan stopped functioning, enterprises were cast adrift which left them isolated as forward and backward linkages were disrupted. The 'value' of enterprises in the planning system depended on their ability to activate formal and informal levers of political power. Thus once the system had broken down enterprises were deprived of the 'network capital' that they had once possessed.

Hungary

The break down of the planning system between CMEA countries had grave consequences for the Hungarian automotive industry. This was particularly the case for the bus production system which saw bus output fall by 70pc between 1988 and 1992 to just 3,670 units. This was largely a function of the inability of customers from the Soviet Union to be able to continue to pay for their orders. Hence between 1989 and 1992 the export of buses to the Soviet Union fell 83pc from 7,000 to 1,200

(Kapitány 1993). IKARUS alone shed over 2,500 jobs and countless other workers were made redundant by supplier firms (see below). The most well known casualty of the crisis was Csepel Auto which was placed into liquidation with the loss of 5,000 jobs out of a workforce of 7,000. However, many other smaller suppliers, such as Ujpest Gepelgyar, which supplied IKARUS with shock absorbers, had to lay off up to 40pc of their employees.

The automobile component producers were also severely affected by the disruption and reduction of trade within ECE. However, they were in a stronger bargaining position due to their higher quality production which VAZ[1] needed to maintain its export of a third of its production to the west for desperately needed dollars. Even so, MMG, which during the 1980s supplied 400,000 sets of dashboard instrumentation to VAZ per year, found that its orders were cut by more than half. Likewise Bakony, a major supplier of windscreen wiper motors and other electrical parts, suffered a 40pc fall in its automotive orders and, in 1990, the termination of its subsidy. Between them MMG and Bakony shed over 2,500 workers between 1990 and 1993.

The transformation of the Hungarian automotive industry, in the sense of its submission to the law of value, was highly uneven. The ability to raise prices to world market levels depended on an enterprise's position in the production chain. The result was an inevitable liquidity crisis as the price of raw materials increased without a corresponding increase in the price of finished products. In the first instance inter-firm

[1] The Russian producer of Lada cars.

links continued as there was a widespread belief that customers would find the money to pay in the future. To keep the entire production system operating the government offered IKARUS and Csepel Auto credits worth 6bn HUF in order to pay their suppliers (Kapitány 1992). All this did was to postpone the crisis in the industry and saddle firms with debt and the burden of large inventories of unsaleable finished goods. In time producers were forced to cut production and faced pressure to reduce their manpower. However, the legacy of the paternalistic state-owned enterprise firms (whose role was to reproduce the labour collective) meant that some firms moved to internalise production to reduce the number of redundancies. IKARUS for example increased its share in the bus production filière from 20 to 40pc by internalising production of the chassis resulting in an unsuccessful legal challenge from Csepel Auto which had been the supplier up to then.

The gradual break down of the state system resulted in the weakening of the hierarchical mechanisms of economic integration and co-ordination which had provided the all-too-limited discipline that had existed in the economic system. These mechanisms were not immediately replaced by the discipline of the market with the result that individual enterprises were cast adrift, insulated and isolated from both hierarchical planning and embryonic market signals. Without the policy or market signals needed to convey the need to restructure, individual firms embarked on defensive strategies designed as much to prevent change as to encourage it (see below). In time so-called market discipline was in fact enforced by the state and conveyed by privatisation policies. The ownership of auto enterprises was transferred to the State Property Agency (SPA) prior to their privatisation. IKARUS and RABA,

owing to their size and the political sensitivity that surrounded their future, were placed in the hands of a separate body, the State Holding Company (AV). In effect the top-down transformation effort was governed by the perceived requirements of privatisation - namely the need to attract investment. Thus enterprises were encouraged to reduce overheads by selling off - where possible - distant plants and reconcentrating production at headquarters plants (mostly in Hungary's five largest cities). Rationalisation also involved efforts to reduce diversity and an increased emphasis on core production. Despite these efforts the privatisation of the sector proceeded slowly.

East Germany

Whereas the Hungarian automotive industry was transformed by the process of CMEA disintegration, the sector in the GDR was not so much transformed as dismantled as part of the country's disintegration and unification with West Germany. The fall of the Berlin Wall resulted in a huge shift in demand away from the Trabant and Wartburg to western, mainly second hand, models. At the same time monetary union and the introduction of the Deutschmark and new accounting procedures exposed, for the first time, the relatively high costs involved in the production of East German cars. Despite this the West German state pledged to continue assembly of the Trabant and Wartburg, in acknowledgement of their importance to national and regional economies. However, rising costs, increasingly weak demand and a change in policies as the *Treuhandanstalt* became more fully integrated into the West German state machinery resulted in a significant change of approach to restructuring east Germany, which had a profound effect on the transformation of the auto sector.

The rise of a neo-liberal approach to transforming East Germany was accompanied by the government decision to renege on its earlier promise to subsidise East German car making by contributing the difference between the cost of production and the market price.

Having decided that there was no potential in reforming the existing industry the entire east Germany automotive industry was dismantled by the *Treuhandanstalt* under the guise of privatisation (see chapter 4). There followed a period in which the heart was ripped out of the East Germany automotive industry as the *IFA-Kombinat* was broken up and offered for sale to western investors. With the decision that SAW and AWE had no future as going concerns, production of the Trabant ceased on 3rd April 1991 with the loss of 9,000 jobs. This was closely followed by the assembly of the last Wartburg on 10th April, resulting in the loss of 11,500 jobs. As a result vehicle production in eastern Germany fell from 217,000 in 1989 to just 17,000 in 1991. This had enormous consequences not only for the vehicle assemblers but also for the component producers who were stranded with worthless inventories and obsolete products and machinery. In this way the West German state untied the links which constituted one of East Germany's most significant industries by first breaking up the forms of integration which linked individual firms within the confines of the plan and later by breaking up the firms themselves. As a consequence two-thirds of all automotive jobs in eastern Germany were lost in 1991 as employment in the industry fell from 128,000 in 1989 to just 54,000 at the end of 1991.

Employment continued to decline as the privatisation process continued. The *Treuhandanstalt*, the *de jure* owner of the industry, sent in new (west German) managers into the firms to prepare them for sale. The result was the introduction of huge rationalisation strategies as new management was forced to find ways of increasing turnover per employee. In addition the *Treuhandanstalt* dispatched teams of management consultants to develop management and accountancy systems which permitted the establishment of profit centres which could subsequently form the basis of privatised independent firms. The effect was to preserve the traditional names of state owned enterprises (even though some of them were only legal successors) but in reality the business had in the most part been completely re-engineered. Further transformation of the industry depended largely on the attraction of West German investors.

5.3 Automotive capital in Hungary and east Germany

At the same time as existing firms were transforming their social basis through the valorisation of capital and labour power, foreign capital began to flow into Hungary and east Germany. Auto-related investments in Hungary formed a significant proportion of DFI in the country. They represented 16pc of all planned investment and four of the largest ten single projects announced up to 1994 (see Sadler and Swain 1994). Up to 1994 in excess of USD 1.4bn had been committed as part of 29 different auto-related investments which stood to create or protect 24,000 jobs (Table 5.1). This contrasted with USD5.5bn earmarked for investment in east Germany by auto firms in 73 projects creating up to 23,000 jobs. Beyond the volume of investment there were some significant differences in the nature of the investment

attracted to the two countries. The majority of automotive investment in Hungary involved the manufacturing of components whereas in east Germany investment in assembly was prominent (see Table 5.2). Another important difference was the origin of the investment. Thus whereas the largest source of investment in Hungary was US owned companies, in east Germany almost 90pc of investment was from west Germany (see Table 5.3). These differences, and a break down of the sorts of investments in component production (see Table 5.4), served to illustrate how auto DFI integrated the two countries in production systems in very different ways.

Although both countries attracted significant automotive DFI, in quantitative terms the flow into east Germany was substantially greater than that into Hungary. However, the flows into both countries were economically and politically significant in shaping the transformations in their respective societies. First, DFI established industrial activity which operated according to the law of value and introduced specific bundles of capitalist social relations and class practice within the confines of the plants. This involved the establishment of a capitalist labour process in which workers became accustomed to new forms and degrees of control over work under which capital was appropriated and accumulated (see chapter 6). Secondly, DFI also established a new basis for inter-firm relations based on prices related to the costs of production. Thirdly, DFI helped to shape broader practices throughout society ranging from the creation of privileged groups within the labour market to the generation of western consumption norms, to lobbying government to introduce specific legislative measures. In these ways DFI had a crucial effect on the uneven emergence of capitalist social relations and uneven regional development.

Hungary

Between 1989 and 1994 USD1.45bn of auto DFI flowed into Hungary - most of it in the years 1991 to 1993. Of the total 29 investment projects (see Table 5.5 and 5.6) 18 involved the creation of new companies with greenfield facilities which collectively planned to create 7,100 jobs. However, in 1994 these plants employed just 3,370. Including investments which safeguarded jobs in existing enterprises, the employment effects of auto DFI increased to 21,500 actual and 25,500 target workplaces (see Table 5.7)[2]. The majority of investment in Hungary involved the production of components in a small number of 100pc foreign owned (mostly US) large greenfield projects which formed parts of pan-European production structures. Together they represented the location of capital and labour intensive elements of production systems. As a result capital intensive engine production (requiring flexible pliant workforces) and the labour intensive assembly of electrical parts - in particular wire harnesses - (which required cheap workforces) was predominant. In addition to the investments, there were a number of license agreements between Hungarian enterprises and foreign, mainly Japanese, component firms (see Table 5.7). The geography of the investments was also significant. The largest number of investment projects and largest volume of investment was located in Budapest (see Table 5.9 and Maps 5.1, 5.2). In addition, investment and job creation was concentrated in the northern and westerly regions close to the borders with Austria and Slovakia (Map 5.3). When just 'greenfield' investments were taken into account

[2] These figures include GE's investment in Tungsram. Although Tungsram was a diversified lighting producer in the years after its take over by GE it became increasingly dedicated to the automotive sector.

the trend towards locating in the western counties was further pronounced (Map 5.4). This included some plants located in rural areas just a few kms from the border. Others, such as Ford, invested in large towns with a tradition in the engineering industry.

Eastern Germany

In eastern Germany USD 5.45bn was earmarked for investment in the new Länder by auto firms in the first half of the 1990s. In total it was estimated that auto firms had earmarked 20pc of all investment earmarked for east Germany by west German industry (Table 5.10). (These figures refers to announcements made up to 1992 which involved investments over a number of subsequent years. However, following the German recession in 1993 investment plans were postponed or scaled down). In total DM 1.5 billion was invested in 1991 and DM 3 billion was earmarked for 1992 as investment up to 1995 was expected to total more than DM 10 billion (see Table 5.11). Also VW's commitment was the largest single investment in the new Länder. By comparison total corporate investment in 1991 was estimated at DM 26 billion and was expected to rise to only DM 45 billion in 1992 (IFO 1992). Two-thirds of all auto DFI that flowed into east Germany went into two major new assembly plants (see Table 5.12). In addition, there were 71 other investments in component assembly (see Table 5.13). Whilst engine assembly was, like in Hungary, important the break down of DFI involved in component production revealed greater levels of diversification than in Hungary. Thus in addition to parts production, there was investment in research and development, tool building and logistics management (see Table 5.4). In contrast to Hungary the capital attracted to east Germany

involved, at least superficially, taking over state owned enterprises and utilising existing facilities, rather than the construction of new greenfield factories or the establishment of joint ventures. However in practice, the west German take over of east German industry was more akin to the establishment of a new industry involving the creation of new legal entities albeit in some cases using the names of the old state owned enterprises and buying property which previously belonged to them. Nevertheless, the utilisation of exiting facilities (often just the buildings) meant that automotive investment reinforced the geography of the existing auto industry in east Germany as 62 out of 73 projects were located in Saxony and Thüringia. Moreover more than half the investment and planned employment was in Saxony alone (see Table 5.14, Maps 5.5 and 5.6). As a result investment was highly geographically concentrated.

5.3.1 Automobile assembly capital in Hungary and east Germany

In response to the stagnation of Hungarian industry in the 1980s the government sought a western company to set up a modern facility and two projects were at the planning stage at the time of the break up of CMEA. The two investments, by Suzuki and GM-Opel, involved the investment of USD 301m and the creation of 2,350 jobs in the assembly of up to 90,000 cars by 1997. Suzuki's project included a commitment to develop a local supplier network and depended on achieving a minimum of 60pc 'local content' for duty-free export to the EU. The motivation behind Opel's investment lay not in the ckd assembly of a maximum of 30,000 Astras per year but in the assembly of 400,000 engines. In evaluating these two projects it is crucial to distinguish between Suzuki, which sought to establish a

'localised' integrated production system, and Opel's more cautious 'branch' plant approach. Not least, the distinction is significant in pointing to the different regional and industrial impacts of the projects.

As the east German auto industry wound down west German companies set about the task of installing new capacity, improving productivity and quality standards in those existing facilities which could profitably be modernised, and generally reconstructing the auto sector in the former GDR. Investment was led by VW and Opel (GM) which between them committed DM 6 billion (including government subsidies worth in excess of DM 1.6 billion) in the construction of two assembly plants, with a combined capacity of 400,000 units annually and a projected workforce of 7,800, and geared towards applying 'lean production' concepts (see chapter 2). In evaluating these developments, it is crucial to distinguish between VW and Opel whose plans explicitly aimed to extend and reform their pan-European regionally integrated production systems into central Europe (and beyond), and those of the suppliers. At the same time German component producers sought to establish themselves in the new market conditions, acquiring and installing new capacity in those factories which could be profitably modernised or in some cases building greenfield facilities. Still others used the new situation to subcontract work to cheaper east German firms. The speed and the scale of auto-related involvement in eastern Germany was indicative of the way in which larger producers, at least, were intent on using the anticipated re-industrialisation of the region as a tool radically to restructure their pan-German and pan-European operations. This strategy depended

on an environment which allowed the introduction of new forms of work organisation and the (re-)creation of the supply chain.

In order to examine in more detail the role and significance of auto DFI involved in car assembly, the rest of this section considers two contrasting projects, Suzuki in Hungary and VW in eastern Germany. In doing so it concentrates on relations between different supply chains as a means of considering the embeddedness of the investments.

Magyar Suzuki Corporation

The creation of Magyar Suzuki Corporation dates from negotiations which began in 1985. At that time Suzuki's involvement in Hungary represented an opportunity to tap into a protected market in return for acting not only as a catalyst for the modernisation of state owned industry but also to improve the country's balance of trade. The project was conceived as a dirigiste state-led project to impose transformation from above. However, subsequent political changes altered the rationale, for Suzuki at least, behind the investment even though it remained very closely linked to the state. The project became an integral part of Suzuki's broader globalisation strategy as it sought to move vehicle assembly out of its high-cost bases in Japan to cheaper locations close to its targeted markets (see Swain 1992a). Whereas its Japanese competitors focused on the major North American and west European markets Suzuki focused on supplying small cars to developing markets, frequently establishing joint ventures with governments, such as in India. Thus

Hungary offered a platform from which to supply western Europe and placed it in a good position to prosper once the east and central European car markets revived.

A new joint venture company was established, Magyar Suzuki Corporation, to oversee the construction of the new facility and the subsequent assembly of the vehicles at Esztergom. The company was established with HUF 5.5bn registered capital owned 40pc each by Suzuki and Autokonzern, a consortium of 62 state-owned enterprises (including component producers), 11pc by the Japanese finance house C. Itoh and 9pc by the International Finance Corporation (part of the World Bank). In addition the company arranged HUF 11bn worth of credit in order to construct the plant (Kiss 1992). In short this meant that the initial capital injection by the Japanese firm was HUF 2.12bn or just 16.6pc of the cost of constructing the plant (Kiss 1992). However, in 1994 the amount of registered capital was increased by HUF 0.9bn (of which some HUF 400m was paid for by the state) to HUF 6.4bn and the equity ratio altered giving Suzuki a greater share.

Thus it is somewhat ironic that Magyar Suzuki, heavily connected to the state, became a symbol of Hungary's re-entry into the capitalist world economy. The project was closely linked to the state in a number of ways. First, it was the state authorities which invited the Japanese firm to locate a plant in Hungary and they did so by offering state owned enterprises as partners in the project through the holding company entitled Autokonzern which was managed by people previously working for IKARUS. In different ways the state paid HUF 2.5bn for its 40pc share in the company. Second, the project received considerable state allowances. In addition to

the general tax holidays offered to foreign investments the project was the recipient of HUF 100m from the investment stimulation fund and HUF 150m from the employment fund. The government also undertook to pursue a trade policy aimed at promoting exports. Other state assistance included exemption from import duty in order to create a 22pc customs preference over other vehicle importers, and the earmarking of a portion of a commercial loan from Japan's Eximbank for the modernisation of the car parts sector (see also Kiss 1992). In this way the Suzuki project was, *de facto*, a major instrument of industrial policy.

The USD 235 m investment involved the construction of a car assembly plant, expected to produce 15,000 Swifts (a model first launched in 1983) in the first year, rising to 60,000 annually by 1997 employing a workforce of 1,300. This represented a significant reduction on the 200,000 capacity figure which had been widely mentioned during negotiations between the company and the former Soviet-backed government. The limited scale of the operation barely made the investment worthwhile leading to speculation that Suzuki would have to increase the size of the project in order to make it economically viable. The utilisation initially of only 10pc of the 350,000 square metre site possibly indicated the scale of the plans that Suzuki had for the development of the project. In addition to the small scale of the project the factory was notable for the fact that it did not represent a large capital investment relative to car assembly plants elsewhere. The plant comprised a panel stamping shop, a body assembly shop, painting and final assembly but the production process was relatively labour intensive and did not involve robots. It seemed that for Suzuki, the project was a long term commitment that would develop according to local

circumstances. Those local factors altered during the negotiation of the project. Of particular significance to Suzuki was the liberalisation of and subsequent recession in east and central European economies and the trade agreement between Japan and the EC which limited the import of Japanese produced cars into the Single European Market.

Following the political changes in Hungary and recognising the small domestic market, Suzuki conceived of the project as a way of breaking into the west European market. Suzuki planned to turn the burden of having to modernise the Hungarian supplier sector into an advantage which could allow duty-free exports to west Europe by-passing the 'voluntary restraint' agreement between the EU and Japan. Therefore, planned 'local content' changed from 30pc to 60pc and crucially the notion of local was widened to include components from the EU. What made this project so distinctive from those elsewhere in Hungary and east and central Europe (apart from the fact that it was the only major auto-related investment involving a Japanese firm) was the emphasis placed on the development of the existing supplier sector and its potentially far reaching regional development impacts. Thus the Ministry of Industry and Trade (1991b) expected that the 'localised' production system that Suzuki required would itself generate more than 18,000 jobs.

Assembly of the Suzuki Swift began in October 1992 and production was scheduled to rise to 20,000 in 1993 and 50,000 in 1995. However, the schedule had not anticipated the weak state of the Hungarian car market which meant that in 1992 Suzuki sold just 6,000 units. Sales remained depressed in 1993 and it seemed

unlikely that the target of 15,000 sales would be reached. Likewise the hoped-for sales of 30,000 in 1994 rising to 40,000 in 1995 were not realistic. This was due to the absence of a middle class with the purchasing power to afford a car. In the summer of 1993 the cost of a Swift ranged from HUF 775,000 to HUF 1,098,000 depending on the model which Suzuki calculated amounted to 30 months of the average Hungarian salary. Weakness in the domestic market and the inability to export to either western Europe - because the 'local content' had not reached 60pc - nor eastern markets - because of tariffs and the absence of a dealer network - meant that production did not rise above 60-70 units a day until the end of 1993; sometime later than had been scheduled. As a way of trying to improve its position in the market place - and recognising that many Hungarians did not perceive the Swift to be a 'modern' vehicle - Suzuki announced plans to increase the number of variations of the model, including a Sedan version, to be produced in Hungary. In 1994 Suzuki announced that it had signed an agreement with Subaru to assemble vehicles in Esztergom. In the light of problems in the market place it became imperative that Suzuki localised production inorder to increase 'local content' to permit duty-free export to the EU.

Supplier relations

Following the political changes in Hungary in the late 1980s Suzuki planned to export 60pc of the cars to western Europe. This strategy depended on achieving a minimum 60pc[3] 'local' (i.e. Hungarian and west European) content to allow the cars to qualify as Hungarian products under the Association Treaty with the EC (signed in

[3] When negotiating investment incentives with the Hungarian government Suzuki initially pledged to reach 70pc 'local' meaning Hungarian content.

1992) and thus exempting them from duty. Therefore the success of the project depended on the creation of a reliable low cost high quality supplier base within Hungary. However, despite Suzuki's strategy to 'localise' production it had no plans to alter its commitment to source high value-added parts such as the transmission and the engine from Japan.

From the outset Suzuki sought to encourage co-operation between its suppliers in Japan and component producers in Hungary. Suzuki organised its first conference for suppliers in 1990 when it invited firms to offer to produce particular parts. Subsequent supplier conferences resulted in 129 companies showing interest in supplying the Japanese plant but only 25 of these were considered by Suzuki to be potential suppliers. After further auditing only 15 were deemed to be genuinely possible suppliers and only then once they had invested in Japanese technology. The first supplier to be offered a contract was IMAG (IKARUS's subsidiary and seat supplier) which supplied seats and a number of other minor parts. It was not insignificant that one of IMAG's senior managers left to become Suzuki's purchasing manager. Through IMAG Suzuki was put into contact with other firms which formed part of the bus production system.

By the end of 1992 Suzuki's efforts had had only a limited effect. Only four of Suzuki's Japanese suppliers had either begun or had announced the intention to co-operate with Hungarian companies. This was a central factor since Suzuki had decided that it would only offer contracts to Hungarian firms which agreed to purchase licences from its suppliers in Japan. However, a major problem was that for

many Hungarian component producers, the small scale of Suzuki's project (60,000 units by 1997) and a lack of capital prevented the purchase of licenses.

Production at Esztergom began in late 1992 with a 'local' content of less than 35pc . Even this low figure was calculated on the basis of the ex-works price and thus included all costs related to production, including for instance depreciation on the buildings. Thus the local content figure included 21pc from the production process (stamping, assembly and painting) in the factory. As production began only two Hungarian firms were supplying Suzuki. Another ten Hungarian enterprises had been given official supplier status by Suzuki but that number included suppliers of goods and services peripheral to the assembly of automobiles, such as publicity materials. However vehicle parts that were manufactured locally included low value-added parts such as wiring harnesses and seats.

In April 1992 Osamu Suzuki, the president of Suzuki Motor Corporation, expressed dissatisfaction with the lack of progress over the local production of components. He cited three specific problems that Suzuki was having in identifying and contracting potential suppliers. First, he commented on Hungarian enterprises' unwillingness to make firm commitments and attributed this not only to a lack of western business skills but also to the uncertainty stemming from the tortuous privatisation process that state owned companies were undergoing. One outcome of this contributed to the second problem: the near-insolvency of many of the potential suppliers, which hindered attempts to access credit to invest in new technology and licensing agreements. Thirdly, the Japanese company was disturbed by the high

prices that potential suppliers were quoting, reflecting the difficulty they were having in trying to meet the much more stringent standards that Suzuki demanded.

To meet the target 'local content' Suzuki encouraged its suppliers in Japan to co-operate with Hungarian suppliers and arranged credit for them to purchase licensed technology. In practice Suzuki would only offer contracts to Hungarian suppliers which had agreed to purchase licenses from its Japanese suppliers. In this way Suzuki was able to devolve responsibility for developing the local supply base to its major first tier suppliers in Japan. By the end of 1992 only four such agreements had been finalised and all involved the production of standardised low value-added parts. The most significant agreement was the purchase by Imag of Mór, of a license from Houwa Kogyo to produce seats for Suzuki. Imag, once one of Europe's largest producers of seats, with a capacity to manufacture 500,000 units annually, had been suffering from lost markets in east and central Europe as well as the contraction of bus production at IKARUS itself. However, as was common in Hungary's state owned industry Imag was highly indebted and the agreement only went ahead after Houwa Kogyo agreed that half of the payment for the technology could be deferred by one year. The Hungarian company also agreed to pay a royalty for the right to produce the components. The other licensing agreements between Japanese and Hungarian suppliers involved the local production of shock absorbers, electric cables and windscreen wiper motors. By the end of 1993 a further two licensing agreements had been signed. One involved Nippondenso which sold a license to MMG, based in Budapest, for the supply of instrumentation panels. Perion (Budapest) also purchased a license from Furukawa Battery Co. for the supply of batteries. (See Table 5.8).

Despite the signing of these agreements the problems surrounding Suzuki's supply base did not dissipate. This was largely because the Hungarian partners were unable to purchase the licenses or the technology required owing to a lack of capital and difficulty in accessing credit. Thus Berva (Eger) signed an agreement with Showa in 1991 but by the middle of 1993 the financing of the agreement had still not been resolved. As Suzuki became more desperate to increase 'local' content it began to contribute towards the cost of purchasing licences and technology. By the middle of 1993 'local content' stood at 51.7pc comprising 21pc from the assembly process, 26.3pc from Hungarian suppliers and 4.4pc from suppliers in the EU. The 26.3pc sourced from Hungarian suppliers comprised the local production of 526 parts by 32 suppliers. Of these 32 local suppliers just 13 were genuinely involved in supplying car parts. Others supplied peripheral products (see Table 5.15 and Map 5.7). A further five suppliers were located in the EU. In addition the majority of the parts sourced in Hungary were either simple, low value added products or in effect represented the assembly of components manufactured in Japan and shipped to Hungary.

Despite these agreements the 'localisation' of the production process proceeded slowly for two reasons. There was considerable delay in bringing contracted suppliers into the production system owing to financial and other difficulties. The second reason was that even where local sourcing agreements were concluded and activated the activities involved amounted to local assembly of parts imported from Japan rather than genuine local manufacturing. Thus the local impacts

of the licensing agreements were limited as the value-added in Hungary remained low as the local content of parts sourced in Hungary was small. Nevertheless both Suzuki and suppliers were keen to proceed with the 'localisation' of manufacturing as soon as possible as the costs of production in Japan rose (due to the increase in the value of the Yen) and the cost of transportation from Japan increased to between 20 and 30pc depending on the nature of the part. However, localisation continued to be slow owing to a lack of capital investment and the low volumes of production required by Suzuki. In the light of the problems Suzuki had in developing a local supply base it was crucial that Japanese parts assembled in Hungary counted as Hungarian parts in order for it to reach its local content figures.

One reason for the slow development of the supply base was Suzuki's approach to auditing, selecting and managing its suppliers. Most Hungarian suppliers were unprepared for the rigorous and time consuming audit process that Suzuki established. Suzuki repeatedly audited potential suppliers demanding information on all aspects of their activities. Suzuki's auditing team were not only interested in technical capacity but also labour organisation, industrial relations, training procedures and long term business plans. Of particular sensitivity was Suzuki's demand to see detailed financial information which firms had not had to compile let alone supply to a potential customer before. In addition Suzuki was also very interested in the privatisation process of the firms concerned.

For Suzuki price, quality and reliability were equally important. In negotiations Suzuki pursued a line which in effect meant that the prices were

non-negotiable. Thus Suzuki, based on its production of the Swift in Japan, would declare what proportion of the car a certain part comprised and used this to calculate the appropriate price. Thus the starter motor was deemed to amount to 3pc of the value of the car so the part was to cost no more than 3pc of the price of the car in the market (around HUF1m in the middle of 1993) including a charge for the suppliers profit (officially around 5pc). In effect therefore, Suzuki used costs in Japan as a bench mark for costs in Hungary.

Suzuki demanded that its suppliers costed everything connected to the production process. Costs were calculated on the basis of social costs per minute (wages and non-wage costs) in addition to material, process and transport costs. For the first time state owned producers had to calculate the costs of various activities with the result that overhead costs were revealed to be extremely high, so much so that Suzuki was unwilling to include them in calculating costs. The result was that suppliers felt Suzuki was not willing to pay the true cost of the activities they were contracted to do. As both sides were increasingly desperate for the agreements to succeed, compromises resulted in which Suzuki either paid more than it had previously been prepared to or disguised costs by leasing suppliers technology or by paying for the purchase of licenses, and on the other side the 5pc profit charge was squeezed to nearer 1 or 2pc as suppliers were keen to secure the business. Where the localisation of production was envisaged the contracts would include specific cost reductions to account for the cheaper costs associated with local manufacturing rather than importing parts from Japan.

With respect to quality Suzuki examined its potential suppliers very closely. In general Suzuki stipulated as a condition of contracting a supplier that it introduced quality assurance systems such as the ISO 9000 series. However, in reality quality control of suppliers was devolved to its Japanese suppliers from which the local suppliers purchased licenses. Thus licensers were responsible for testing and checking the quality of parts assembled in Hungary. Also all agreements included a clause that if the quality of supplies from the local firms was inadequate the Japanese partner would fly in replacement parts at their expense. This meant that Suzuki's Japanese suppliers showed a close interest in their licensees and sent over experts several times a year (at the expense of the Hungarian firms) to check the quality of local assembly operations and also of sub-suppliers. Clearly concerns over quality in local firms delayed the localisation of production and where localisation took place the Japanese firms had to guarantee quality. In practice the Japanese partners controlled the machines and the production processes in the Hungarian firms.

Suzuki's Hungarian suppliers were also struck by the Japanese approach to reliability and other supply issues. The contracts between Suzuki and its suppliers stipulated 'just-in-time' delivery (the frequency depended on the volume of production at Esztergom). The contracts also included a clause that the supplier was liable for all costs resulting from a disruption of production due to late delivery. As a consequence all the local suppliers maintained a reserve inventory of finished products (of up to 4 days of production) in case of production problems, a cost they were unable to pass onto Suzuki directly. Through its relations with its suppliers Suzuki was also able to place the burden of storing unfinished goods on local firms. Thus those firms which

assembled components from parts shipped from Japan were squeezed by their suppliers and Suzuki. As the volume of production increased more slowly than was intended, shipments from Japan to local suppliers occurred at infrequent intervals - often once every three months - but they were required to supply 'just-in-time'. In this way Suzuki passed on the cost of storing unfinished components on to its Hungarian suppliers - which were not well positioned to account for the financial burden. Hungarian firms were also struck by some of the other conditions that Suzuki placed on them. In all cases the supplier was responsible for the transportation of the parts to Suzuki's factory and in some cases suppliers were requested to alter or design completely new forms of packaging and storage to permit ease of transportation and enable parts to be shipped straight to the line without the need for additional handling.

In addition to the licensing agreements, at the end of 1993 the first joint venture involving a Japanese component firm was announced. Its significance was further enhanced as it was the first agreement with a private Hungarian company as opposed to all the others with large state enterprises dating from the soviet era. The joint venture established Daikan-Bakany in Tatabanya to assemble clutches for Suzuki. However, whilst there were plans to manufacture some of the parts for the clutches in Hungary in the future the business plan involved the assembly of parts, all of which would be imported from Japan. It remained to be seen whether a joint venture would result in more genuine localisation than seemed likely with the licensing agreements but Bakany held out the long term hope that it would manufacture some 90pc of the clutches in Hungary.

To those firms which were designated as official suppliers, the Japanese firm offered the prospect of a long term mutually beneficial business relationship. The suppliers characterised the relationship more as a technical assistance agreement rather than a standard contract between an assembler and a component producer. Thus the contracts that were signed between Suzuki and local suppliers were open-ended and efforts to develop a co-operative relationship were evident. Suzuki set up a three month long supplier development course funded jointly by UNIDO and the Japanese government to work especially closely with 12 suppliers which aimed to develop Japanese production methods in the fields of quality assurance and team working in particular. More generally Suzuki was also a leading force behind the establishment of the Hungarian Association of Automotive Component Companies which was designed to raise the quality standards of the local supply base. Intriguingly the other stated purpose of the Association was to facilitate Hungarian suppliers to find customers other than Suzuki to enable them to become more financially secure owing to larger production runs. The Association - which was entirely funded by the fees of the 30 members (comprising traditional as well as new component producers and consultants) - provided advice and services connected to quality assurance systems, investment financing, and foreign business contacts. Suzuki hoped too that the Association would lobby the Hungarian government for assistance and would co-ordinate applications to the various industrial development funds that existed.

The relationship between Suzuki and its local suppliers became closer in the face of adversity. To assist local firms to finance capital investment so that Suzuki

could develop a local supply base the Hungarian government underwrote a Japanese loan through Eximbank which was to be disbursed by Hungarian commercial banks to Suzuki's suppliers. However, owing to the risky business environment the Hungarian banks did not pass on the 'soft' repayment terms connected to the loan which meant that Hungarian suppliers dare not take the loans at such high interest rates whilst Magyar Suzuki had yet to increase the volume of production. The result was a chronic shortage of capital amongst the suppliers which hindered the purchase of licences and technology. In response Suzuki began in certain circumstances to offer to pay for the purchase of licenses to enable local sourcing of significant products such as the starter motor. In addition Suzuki started a scheme of purchasing capital goods (machine tools) and locating them in supplier factories to increase local content. Where this took place the costings of supply contracts took this into account and included a clause that after a certain production volume the ownership of the capital goods were to be transferred to the supplier.

However, despite the closeness of the links and the prospect of a long term relationship, many of Suzuki's Hungarian suppliers were critical of the behaviour of the Japanese firm. First, many were critical of Suzuki's insistence that they had to purchase licences before being given official supplier status, feeling that in many cases they were capable of producing the part to the required standard. Some felt that this stipulation undermined Hungarian businesses by sucking them dry of precious funds for capital investment. They expressed concern too that Suzuki was more interested in protecting its Japanese suppliers' businesses rather than assisting in the creation of a low-cost high quality supply base that would be in competition with its

existing suppliers in Japan. It was noticeable in the light of this that where licence agreements were reached they placed restrictions on local firms. In almost all cases the contracts made between Suzuki, its Japanese supplier and the Hungarian supplier in practice, if not in theory, prevented the Hungarian firm from supplying other Suzuki plants across the world. Other licence agreements for the production of generic products which could be sold to other car manufacturers, such as shock absorbers, prevented Hungarian suppliers from supplying customers in western Europe. In effect the licences meant that the European market was divided into two, permitting the Hungarian firms the chance to develop markets in east and central Europe but leaving the Japanese firm free to supply customers in western Europe. The result of such a procedure was to place limits on the development of Suzuki's Hungarian suppliers. Thus it remained to be seen whether the Hungarian firms which had purchased Japanese technology would be in a position to derive the maximum advantage from it.

Thus much remained to be done to create a low cost high quality supplier network in Hungary. However, Suzuki pledged to continue with the development of a local supply base and reach 60pc 'local content' but it would not predict when it would reach that figure. The overwhelming need for Suzuki to achieve this figure, to allow preferential access to the EC market and to cut the costs of transporting parts from Japan, led it to put pressure on the Hungarian government to help potential suppliers open lines of credit from Japanese Eximbank worth HUF 3.5 billion. Suzuki felt that the uncertain privatisation process and the banks, which were not

passing on the benefits of the soft loan facility to manufacturing firms, were hindering the development of the supply base.

In turn the Japanese firms' cautious approach involving licenses rather than acquisitions stood to limit the sector's development. The indebtedness of most state owned firms and the cost of purchasing a Japanese license to produce sufficient parts for only 60,000 vehicles in the medium term at least, meant that for many the agreements were not considered to be viable. Despite the offer of credit from Japanese finance houses, including C.Itoh which had an 11pc share holding in Magyar Suzuki, the privatisation process made the securing of credit difficult. A further problem that might yet develop for Suzuki arose from the agreements' limited scope emphasising technology transfer without the associated practices and methods that it expected from its suppliers in Japan. Therefore, the extent to which the Hungarian firms would be able to meet Suzuki's requirements and, indeed, the power that Suzuki would have to enforce them remained in doubt.

Volkswagen Sachsen GmbH

Volkswagen's early and rapid expansion into eastern Germany formed an integral part of its broader, pan-European strategy, as it sought to move not only car assembly but also component manufacture and procurement out of its high-cost bases in west Germany. But it also played a politically significant symbolic role (see Swain 1992a). However, as the project developed VW began to present it as not only the latest re-location from a high- to a low-cost economy but also the establishment of a 'new' (at least to Germany) production system. In particular VW publicised its

investment in the new Länder as an exercise in 'lean production'. Two innovative strategies were woven into its plans. First, the assembly plant was to have a low level of vertical integration and place emphasis on developing a cluster of local suppliers around the plant to supply modules just-in-time to the assembly line. Second, the plant was to introduce a new system of labour organisation (see chapter 6).

With links to the IFA-Kombinate, and SAW in particular, dating from the mid-1980s, and as political change accelerated, VW began to look for potential investment opportunities. However, instead of acquiring SAW with its 11,500 workers and obsolete product it began an elaborate strategy designed to 'green' a 'brownfield' site and to invest in Zwickau without assuming the liabilities of the Trabant maker (see below and chapter 6)[4]. In December 1989, a month after the fall of the Berlin Wall, VW established a joint venture, VW-IFA-PKW GmbH, in which it had a 50pc stake, with IFA-PKW to prepare passenger car production in Zwickau. In due course the joint venture was transformed into a wholly owned subsidiary of VW. At the same time VW Sachsen Immobilienverwaltungs GmbH was established to purchase a site next to SAW's most modern facility in Mosel (Mosel I) and to begin the construction of a DM4.6 billion integrated car assembly plant (Mosel II) to employ 5,800 and produce 250,000 vehicles per year from 1994 onwards.

Also in December 1989 a joint venture, Sächsische Automobilbau GmbH (SAB), was formed by the THA and VW to establish a temporary assembly operation in Mosel I. Although VW had management control of the joint venture the THA had

[4] In the mean time SAW was broken up and ultimately liquidated by the THA (see below and chapter 6).

an 87.5pc stake in it. SAB commenced the assembly of CKD VW Polos on SAW's Trabant assembly line beginning in May 1990. Initially just 50 vehicles a day were assembled but the volume increased to around 380 per day employing 1,860 on three shifts. In addition in 1991, two further companies, wholly owned by VW Group, were established to take over some other IFA-PKW facilities. In June 1991 VW formed Motorenwerk Chemnitz to acquire and operate the Barkas engine plant that it had equipped in the mid-1980s (see chapter 4). In addition to the site in Zwickau, VW Sachsen Immobilienverwaltungs purchased a site adjacent to the Chemnitz factory and began to construct a new engine plant. Also Zylinderkopffertigung Eisenach GmbH was formed in December 1992 to acquire and operate a cylinder head facility formerly owned by AWE (see *Automobil-Produktion* 1993).

In the summer of 1992 the first part of the new assembly plant, Mosel II, was opened and accompanied the establishment of another wholly owned company, VW Sachsen GmbH (incorporating the plants at Chemnitz and Eisenach), to operate the new production facilities. However, in early 1993, with VW having embarked on a huge investment programme not only in eastern Germany but also in the Czech Republic, the German recession forced it to delay investment and postpone the complete opening of Mosel II until 1997.

The presence of the West German Chancellor, Helmut Kohl, at the laying of the foundation stone of Mosel II in September 1990 (prior to unification) indicated the political significance of the investment. Not least the speed of VW's investment in Sachsen helped, in part, to underpin the West German government's demands for

rapid unification. Crucially VW's commitment to east Germany helped to legitimise the privatisation process and the THA (see Hahn 1992). In particular the assembly of VW cars in a plant which had only just stopped production of the Trabant signified the prospect of a painless transition from a planned to a democratic market economy. VW's investment was thus a 'carrot', an early tangible result of the process of German unity and symbolised the bright future that lay ahead for the new Länder in a united Germany as they sped towards the levels of prosperity enjoyed in the west. The investment was therefore closely linked to the west German state. First, the THA guaranteed to cover any losses resulting from the temporary CKD operation. Second, various state bodies contributed DM 1.3 billions worth of subsidies and incentives towards the cost of building Mosel II. In total the west German state agreed to contribute 40pc of VW's anticipated DM 5 billion investment in eastern Germany (*Industriemagazin* 1990)

VW's symbolic role was not lost on the company either; Carl Hahn, VW's chairman at the time, and himself from the Zwickau area, believed the project enabled VW 'to fulfil a role that is not only industrial but political too' (quoted in *Financial Times*, 13 March 1990). After VW had been accused of being guided by a philanthropic logic, Hahn defended VW's investment in Saxony as follows:

> 'We have taken on a commitment in eastern Germany... for reasons close to our hearts in all respects. We were not guided by altruism - rather by feelings of national, or better national economic, responsibility. Something which all of us as entrepreneurs have to accept. But basically it was sober calculation which induced us to go into... Saxony'. (Hahn, 1992, 2)

This statement could not hide the extent to which VW's involvement in the new Länder was more than just another investment project. However, VW was also committed to the introduction of 'lean production' in the new plant. Not least this centred on the establishment of an efficient local supplier base. Thus VW Sachsen's symbolic and industrial role was fused in a *commitment to the region* under the banners of *VW in Sachsen* and *Eine Region formiert sich neu* (A region is rebuilding itself). In addition VW invited local people to identify in the company under the banner of *Ich gehöre dazu* (I belong to it). As a result the company publicly emphasised its close and co-operative relationship with local Mayors and the local authorities. VW involvement in and commitment to the region was highly publicised (see for example VW Sachsen GmbH *et al.* 1992, *Automobil-Produktion* 1993)[5].

By 1993 the VW Group claimed to employ directly and indirectly 28,550 people in eastern Germany. This figure comprised 3,300 working for VW Sachsen, 12,207 other employees in the new Länder working in dealerships and transportation, 660 in direct suppliers to Mosel and another 12,300 in component producers which supplied the VW Group. VW also particularly emphasised the role it played in improving the local infrastructure for the benefit of the entire region. Thus by March 1993 VW had earmarked DM503m for seven different local infrastructural projects.

VW's role in eastern Germany illustrated the way unification depended on 'foreign' investment to establish not only a new industrial structure but also a new and

[5] It was also instructive that in the course of the early 1990s VW played down its co-operative relationship with the increasingly unpopular Treuhandanstalt.

different pattern of state responsibilities and a new politics of the workplace (see also chapter 6). Here however we consider the logistical system pursued in Saxony.

Supplier relations

From the mid-1970s onwards VW began to source components from the GDR. Between 1975 and 1989 VW procured components worth DM718 million. In 1990 parts worth DM175 million were purchased from suppliers in the (ex-)GDR. As a result VW already had established links with GDR suppliers at the time of the *Wende*. However, the disruption to the production system arising from the termination of passenger car assembly and the THA's reorganisation of the sector forced VW effectively to start from scratch. With production halted and with suppliers in rapid need of alternative business, VW enjoyed a monopolistic position and an opportunity to refashion the assembler-supplier relationship. At the same time there developed a group of dependent suppliers that sought VW's largesse. VW, initially with IFA-Kombinate, arranged a series of conferences for suppliers at the same time as persuading its traditional suppliers in West Germany to acquire THA owned eastern producers or establish greenfield facilities. In this way VW played a highly important role in encouraging investment in component suppliers but also a highly *interventionist* role by establishing the preconditions for the future development of the industry. In particular VW legitimated the positions taken by the THA regarding reorganisation and restructuring, agreeing in some cases only to contract suppliers after 'satisfactory' rationalisation and restructuring plans had been implemented.

In total VW helped 97 east German firms to find strategic investors. This was achieved in four ways (see *Automobil-Produktion* 1993). In the first half of 1990 VW established a know-how-transfer programme between 109 of its west German suppliers and 73 parts producers in the GDR. Second, VW increased its procurement from east Germany from DM175 million in 1990 to DM1.1bn in 1991. In 1992 procurement increased to DM 1.9bn. Third, VW signed letters of intent relating to future supply contracts with some producers. Fourth, VW sought western partners for east German producers. By the end of 1992 VW had granted official supplier status to 54 firms in east Germany. Collectively these firms supplied DM458 million worth of original equipment material. By March 1993 the number of official VW suppliers in the new Länder had increased to 87. In sum these enterprises employed 12,300 workers and supplied all four VW marques. Over half of the suppliers were located in Saxony (45), east Germany's industrial heartland and historic centre of the automotive industry. A further 24 suppliers were located in Thuringia (see Map 5.9). This gave an indication of the concentration of automotive firms in the south-west of eastern Germany. However, the industry was also concentrated at the local scale. Thus in 1993 there were 13 component producers (there were others supplying auto-related services) located in the Zwickau region alone. Collectively these employed 2,493 workers and had earmarked investment worth USD 141 million in the local area (see Table 5.16). Of these 13 auto-parts firms in Zwickau region, ten supplied VW Mosel and one other supplied other VW plants. In the light of VW's emphasis on mimicking Toyota's logistical system the clustering of suppliers in Saxony in general and the Zwickau region in particular was significant (See map 5.8)

Owing to the construction of a 'lean' plant (vertical integration was 25pc at Mosel compared to 43pc at Wolfsburg) the supply base and logistical system was particularly important to the project. In particular VW Sachsen placed great emphasis on modular sourcing and 'just-in-time' production and delivery. Crucially, at the time of the project's formulation VW equated 'just-in-time' logistics with the need to have a cluster of subassembly suppliers located around the assembly plant. Whilst this approach was in part a reflection of east Germany's poor infrastructure (supplies shipped by rail from Wolfsburg were frequently disrupted in the first two years of operation), it also reflected VW's view that a Toyota-style clustering of suppliers would increase efficiency. As a result VW stated that:

> "The development of an efficient supplier industry *in the region* is... essential to enable production to be optimised to the fullest extent possible, for our advanced manufacturing concepts and high quality standards can be realised only if our operations are backed by reliable suppliers."
>
> VW Annual Report 1991,27 (emphasis added)

Initially, VW intended to establish the 'just-in-time' supply of 60 parts and sub-assemblies. However, once investment was postponed and VW altered its purchasing strategy the number of JIT projects was reduced. As a result only eight sub-assemblies were produced synchronously and delivered to the line 'just-in-time' by 1993 (see Table 5.17). Mosel's own logistics department was responsible for the eight JIT projects and the other supply contacts were managed by VW Wolfsburg. In most cases VW externalised parts of the *assembly* operation, such as the front-end and the instrument panel, which were internalised within other VW assembly plants. Given that externalisation placed great responsibility onto suppliers, VW selected its

most long standing partners, such as Hella and VDO, to participate in the JIT projects. However, externalisation was only partial. As the suppliers carried out operations that VW did itself elsewhere, VW remained closely involved. Thus VW in some cases organised and managed the suppliers' logistics, including for example negotiations and contracts with sub-suppliers. This meant that VW had an intimate knowledge of the costs of each operation which made it difficult for the suppliers to increase profit margins without VW noticing and demanding a corresponding reduction in prices. The suppliers did not have standard contracts with VW but were given guarantees that they would supply the part for the length of the production run of the Golf III. The price VW paid was not agreed on a cost per unit plus profit basis but rather on an anticipated volume over a period of time plus profit. Thus agreements were made on the understanding that VW would open the new plant in 1994 and increase production from 400 units per day to 1,200. However, as production volumes did not increase in line with expectations, suppliers found themselves in a difficult financial situation as unit costs remained high. This was just one example of the way the externalisation of production transferred risk and uncertainty from VW and on to its suppliers. Crucially however, VW had to pay a cost for this advantage. Thus when the JIT project agreements were signed VW did not always pick the firm which offered the lowest price.

To ensure security of supply the company encouraged suppliers to locate within a 30km radius of Mosel. However, given the emphasis that VW placed on the modular sourcing of bulky sub-assemblies, such as the dashboard and the front-end, and the transferral of the responsibility and the cost of delivery on to suppliers, there

were some traditional reasons, based on neo-classical economics, for suppliers to locate close to Mosel. Moreover, proximate location forced the suppliers to depend upon VW Sachsen which permitted VW to dictate strict supplying conditions (see Jägler 1990). However, VW was also fearful of over-concentration. As a result it instructed its suppliers not to locate too close to Mosel and thus risk creating a labour shortage and wage inflation. In addition to the eight JIT projects a further eight components and subassemblies were delivered just-in-time to a Logistics centre, owned and managed by the suppliers, that was located in Gauchau, 5km north of Mosel. Components were stored at the centre before being delivered just-in-time to the assembly plant.

Having established a cluster of suppliers around the assembly plant, VW Sachsen procured a portion of its inputs from the local area and beyond, elsewhere in east Germany. Thus VW Sachsen procured DM20 million (including DM4m on services) worth of components from eastern Germany in 1991; in 1992 this increased to DM40million (including DM8m on services) (*Automobil-Produktion* 1992, 68). However, whilst the volume of production remained small, the impact of local sourcing was relatively insignificant. Thus the eight modular just-in-time suppliers employed just 380 people on production for VW Mosel in 1993 and collectively had invested DM25.3million (see Table 5.17). This meant that when added to the 2,400 employees at VW Sachsen's Mosel plant the investment employed 2,780 in the Zwickau region. The importance of these modular suppliers was further undermined as they were assembly plants with low levels of value added. In addition, the supplier plants carried out operations that elsewhere would be undertaken in a conventional

assembly plant. Thus these suppliers merely compensated for the lower level of activity in VW's assembly plant. In addition the logistics centre employed 100 people and represented a DM3.5million investment. VW Mosel also sourced parts from 20 other plants in east Germany which collectively employed 3,710 at the end of 1992 (see Table 5.18). This meant that at the beginning of 1993 VW Sachsen's procurement from the new Länder employed 4,090, or around one third of the total for VW Group as a whole. It seemed unlikely therefore that the project would ever create the 35,000 jobs that VW anticipated in 1990 (Swain 1992a).

VW thus established a cluster of suppliers around the assembly plant and developed very close links between itself and its favoured suppliers. To achieve this VW had to reduce market co-ordination (based on price) and in some respects introduce elements of a planned approach; co-ordination of its key suppliers was separated from the market and was bureaucratised. Thus in the course of trying to impose 'lean production' from above it established an unwieldy and inflexible organisation that was not as efficient as had been expected. One example of the inefficiency of the system was the way suppliers were encouraged to operate on a three minute cycle time (since this was how the VW assembly line worked) even though the assembly of some modules could have been more rapid and more efficient as a result. Thus synchronous production mean that suppliers were too closely integrated with VW's assembly line. As a result of a change in VW Group's purchasing strategy in the course of 1993, in which 'global sourcing' was adopted, the emphasis placed on clusters of suppliers was reduced.

5.3.2 Automotive component capital in Hungary and eastern Germany

Hungary

To capitalise upon its tradition in component production, and as part of its strategy to become a car manufacturing country, Hungary sought to attract automotive component producers which would establish it as a centre of automotive production at the periphery of the EU and at the bridgehead to new potential markets further east. In addition to Suzuki and GM-Opel's investments in car assembly, USD1bn was invested in component production between 1990 and 1994 in 24 separate ventures. Collectively the investments represented 76pc of all auto related investment attracted to the country. Individually the investments and ventures varied considerably both in the way they were embedded into the local economy and in the way they fitted into international production *filières*. In this way the projects indicated the way Hungary became integrated into the global capitalist economy.

In terms of their relationship to the local economy two very different types of ventures were established, indicative of two quite different development paths. The first type of venture was the (mostly) license agreements which involved Japanese firms and local producers as part of the Suzuki project which aimed to establish a localised production system (Table 5.8). The second type, by far the most significant in terms of capital and jobs, was largely 100pc foreign owned production facilities linked into pan-European production systems with few local industrial linkages, or in other words the development of a classic branch plant economy. Having examined the attempt to establish a localised production system above, this section considers the significance of the branch plants.

Amongst the second type of investments there were two noticeable trends: a specialisation in the production of engines/parts and of electrical components. The manufacturing of these two very different types of part implied quite different production processes with different local implications. The production of engines and engine parts involved capital intensive production processes which required continuous rostering systems and a labour market able to supply a core of skilled workers and pliant labour which could be trained as operators. In terms of job creation, the electrical plants were far more significant than engine production. These plants involved the production (mostly) of low value-added labour intensive electrical and lighting components largely employing low skilled, female workers. The predominance of these two sorts of ventures had important implications not only for regional development but also for the sorts of regulation demanded by a private sector dominated by influential foreign auto firm managers which in turn helped to shape perceptions of 'realistic' economic development strategies.

The two largest component investments by value were the two engine ventures by GM and Audi. In 1992 GM Hungary, in addition to its CKD car operation, began manufacturing up to 200,000 units per year of a new model of engine at Szentgotthárd to be supplied to GM Europe's production system. This was followed by a USD213m investment by VW-Audi in a new engine plant at Györ to produce 220,000 engine cylinder heads employing 200. In a similar vein to GM, Audi imported the castings from its forges in west Germany and exported the finished cylinder heads back to its plants in Germany. Both these plants were

'greenfield' 'enclaves' isolated from the industrial transformation of the country with few industrial or local linkages of significance. In the case of GM this was poignantly indicated by its status as a custom free zone just metres from the Austrian border.

The investments involving the production of electrical components were dominated by four plants which produced car wiring harnesses with imported inputs for west European customers. The largest investment was made by United Technologies Automotive (UTA) which built a USD10 million wiring harness plant in Gödöllö near Budapest which began production early in 1993 employing 500 workers, producing primarily for Citroen. Packard Electric (a subsidiary of GM) also established a plant to assemble wiring harnesses for GM Europe in Szombathey near the Austrian border employing 400 people. A German cable company, Michels, built a USD1m greenfield plant in Mór employing 350 people. The final wire harness plant was established by an Austrian-Hungarian joint venture called Kromberg-Schubert Kft located in Koszeg, also on the Austrian border, which supplied Mercedes Benz in Germany.

There were two other investments in electrical components which differed from those mentioned above. Ford's greenfield plant involved the production of more modern and higher value-added products and combined it with innovative business practices (see below). In some respects then the investment mirrored those by GM and Audi in requiring an environment suited to capital intensive continuous flow manufacturing. The largest electrical investment was made by General Electric when in 1990 it took over Tungsram, one of Europe's largest light bulb producers, and

Hungary's most successful state owned enterprise. Following the take over, GE concentrated its automotive lighting division, incorporating Thorn EMI Lighting, at the company in order to turn Tungsram into GE's European-wide centre of automotive lighting manufacture. This was a rare example of a foreign investor attempting to modernise a former state-run firm.

All these plants were established as responses to the restructuring of the supply chain as west European car assemblers sought to reduce the number of direct suppliers, resulting in the emergence of a small number of large plants capable of supplying the entire industry. At the same time automobile manufacturers were comparing the advantages of sourcing parts internally or externally from independent suppliers. Within those two broader trends the plants in Hungary represented the location of capital intensive and labour intensive stages of the supply chain. They were largely separate from the indigenous engineering sector and did not foster an environment likely to have much modernising impact on it.

In these ways foreign investment helped to shape a Hungarian automotive component industry which could be seen to fit into three divergent development paths. The first was the portion of the sector which was bypassed by foreign investment and which struggled to adapt to the new economic environment. The second development was the establishment of a supply base which lacked capital inputs and which was very dependent upon just one relatively small customer, Magyar Suzuki. The third development was the formation of a new foreign owned

component sector in Hungary which was functionally integrated into and sustained by pan-European production systems.

Eastern Germany

Eastern Germany differed from Hungary in crucial ways which helped to shape the sorts of investment that were located in the country and the local effects they subsequently had. Unlike Hungary, East Germany had a component sector that comprised 30 small producers which formed part of a national industry controlled by the *IFA-Kombinate*. The privatisation process (which resulted in the dismantling of IFA and the termination of production) cast adrift supplier firms from the production system. With the complete disintegration of the old GDR automotive industry, the only option open to hard pressed managers, other than liquidation, was to seek integration into (principally) the west German component sector. In the absence of any other alternative there followed a 'beauty' contest in which individual plants sought to attract the affection of foreign (mostly west German) firms. The outcome of this competition in large part reflected both the different positions the plants filled in the *Kombinate* (facilities had different access to foreign technology, investment and foreign trade rights) and restructuring in the west German component sector. There were two rounds of investment which differed in volume and the ways in which they fitted into corporate strategies as opinions on both the likely course of development of the new Länder and the strategic restructuring of the European car industry altered.

The first round of investment by car component producers, between 1989-1992, was buoyed by the investments by VW and GM-Opel, and expectations

that the new Länder would become and remain for some time a low cost production location within a high cost Germany and a gateway to potential markets further east. In addition the west German car component industry was expanding rapidly, following the surge in car sales generated by monetary union, with employment in the sector rising to a peak of 788,000 in 1991. In such a period of enthusiasm, during which firms either relegated the prospect of rationalisation as part of European-wide restructuring or used it as a pretext for investment, large European component makers, such as Bosch and GKN, moved quickly to purchase attractive, relatively modern, large production facilities, in these cases FER and GWM respectively, with sales across both parts of Europe. Such investments tended to form part of corporate strategies which aimed to establish large production centres in relatively low cost locations which could be used to supply assemblers directly (or through subassembly plants) across the whole of Europe. At the same time there were a number of smaller investments by some of the larger traditional VW suppliers, for example Siemens, Hella, and VDO, which established small facilities for the sole purpose of supplying modules and systems in small volumes to VW Sachsen at Zwickau (see below). In many cases these projects involved the purchase or leasing of small existing buildings but in some cases, such as the seat manufacturers Naue and Lear Nossag which combined both the pan-European and local strategy, built large new facilities on greenfield sites. It is instructive to note too, that both Naue and Lear, established US firms, used these opportunities to enter the European car sector for the first time.

The second round of investment, in the period after 1992, took place after the most attractive enterprises had already been sold by the *Treuhand* and after VW had

indicated that its scheduled investment in Saxony would be postponed until the German car market recovered. In spite of the investment that took place shortly after unification the sector in the new Länder remained peripheral to the west German automotive industry. In large part this reflected the distinctive structure of the German components industry in which the *Mittelstand* predominated. The size, the regional concentration, and their loyalty often to just one car manufacturer, meant that the *Mittelstand* tended to avoid risk and were hence reluctant to invest in volatile east Germany. At the same time, the distraction posed by the post-unification boom began to wane and force firms to consider some structural problems that faced the industry in Germany as a result of being in a high-cost country increasingly under pressure from lower cost competitors. Thus it was significant that two concerns which particularly troubled west German suppliers, high labour costs - in 1992 labour costs per hour in west Germany were DM47.04 per compared with DM33.30 and DM26.16 in Japan and the UK respectively - and hours of work - 1,487 in west Germany compared to 2,181 and 1,830 in Japan and the UK - could be overcome, at least in the short term, by shifting production to the new Länder (VDA 1993). To facilitate investment, especially by the west German *Mittelstand*, both state owned firms and the selling procedure were transformed to make new Länder seem more attractive.

The dynamics of the second round of investment were significantly different from earlier ventures in that they often involved the purchase of 'empty shells' rather than going concerns (see chapter 4). The 'empty shell' investments involved foreign firms purchasing the name of a state-owned producer in east Germany but without becoming the official successor of the firm in the eyes of the law. This type of take

over allowed investors to buy buildings at knockdown prices, and with considerable state support; to choose the size of the workforce, which in legal terms became a new workforce with fewer employment rights than would otherwise been the case; to escape responsibility for the rest of the original employees - such as paying redundancy benefit; and to avoid the burden of environmental liabilities. In these respects 'empty shell' investments resembled greenfield projects albeit often utilising existing buildings.

The advent of the sale of 'empty shells' to foreign investors coincided with not only political pressures to tighten up the sales procedures used by the *Treuhand* but also a severe recession in the west German car industry. These conditions, and the business culture of the *Mittelstand* which inclined them to look to invest in 'going-concerns' (which effectively did not exist), reduced investment and undermined the integration of the east German sector into the German and European car industries.

In total some USD 1.2bn of automotive component investment flowed into eastern Germany in the early 1990s, representing some 22pc of all auto investment and creating or safeguarding more than 13,651 jobs[6]. The vast majority of investment was made by German firms which either saw their ventures as concrete evidence of the efficacy of unification for east German citizens, or were simply cost-led, seeing the new Länder as a low cost location without the labour market rigidities found in

[6] Precise calculations of investment in the component sector in the new Länder are impossible owing to the *Treuhandanstalt*'s willingness to include non-binding investment guarantees in the data it provides.

western Germany. The next largest source of capital was US companies which used unification to gain a foothold in Europe's largest car market. Other investments by non-German firms were made by large component firms, such as GKN (UK) and Valeo (France), as part of the Europeanisation of the component industry.

In contrast to Hungary, the geographical spread of investment in the new Länder was highly regionally concentrated. In large part this reflected different paths of transformation in the two countries. Whereas investment in Hungary largely bypassed local producers, in East Germany of the 67 main investments only seven did not involve taking over or forming a venture with a local production facility. As a result the investment flowed to locations with a tradition in the industry. The irony of this situation should not be lost: it was the total dismantling of the GDR production systems that made investment attractive in the traditional automotive regions of eastern Germany. In consequence investment in the component industry in the new Länder mirrored the pattern of regional concentration in western Germany, with concentrations around Dresden, Zwickau, Leipzig and western Thuringia.

As in Hungary the largest volume of capital (39pc) that flowed into the country involved the production of engines, engines parts and clutches. However, the electrical and lighting sector represented only 14pc of capital but involved the creation of 2,600 jobs. Other sectors which were significant job creators were tool making, suspension and steering and forged part making. Another important difference from Hungary was the *scope* of the investments. Collectively the investments were more varied in terms of the products - which included research and

development and logistics functions - and the way they fitted into transnational production structures. The developing component sector was thus very different from that in Hungary and would have significantly different implications in terms of paths of economic development.

The biggest investment in terms of capital was made by VW which began building a USD400m engine plant in Chemnitz employing and intended to employ 550 people. However, as was the case with the assembly plant in Zwickau, problems specific to VW and the recession in the car market forced the company to delay the investment schedule. The second largest project was Bosch's take over of FER, a producer of electrical components with facilities in Eisenach and Brotterode. In addition it constructed a new greenfield plant at Eisenach and employed in total 2,200 in eastern Germany. Phoenix purchased Gummiwerke Thüringia and invested USD86 in the third largest project in the region and gutted and reclaimed the buildings and installed new technology to improve the production of rubber parts and to increase production and create up to 1,000 jobs.

As has been indicated throughout this section the investments in Hungary and eastern Germany by component producers were connected to the restructuring processes in the European auto industry (see Chapter two). The investments posed an opportunity to introduce and experiment with new management techniques, not least with respect to supplier relationships and logistics. To examine in more detail some of the ways in which investors used the conditions generated by transformation processes to refashion local and global supply linkages we examine in depth the

investments by GKN which purchased GWM from the *Treuhandanstalt* in eastern Germany and first, Ford's greenfield plant in Hungary.

Ford Hungaria

Ford was alone amongst the large car assemblers in not investing in car manufacturing in ECE (Sadler *et al.*, 1993). This was due to over capacity and its 'After Japan' restructuring programme at its west European plants. The company had however already decided to produce in-house a new generation of electrical components, including fuel pumps, ignition coils and starter motors, which had previously been supplied by Bosch and Nippondenso, when location in ECE became a possibility. Instead of locating the plant in Portugal, which had been provisionally agreed, the company sought to use the new opportunities to locate in Hungary on favourable terms. Thus locating in Hungary was not simply an example of moving production from one higher cost location to another cheaper one but was integral to Ford's sourcing strategy in which the boundaries between firms within supply chains were shifted[7]. Nevertheless, investment in Hungary offered the prospect of cheaper labour than anywhere in western Europe and, in the short term at least, preferential access to a virgin market. In a further innovative move Ford's investment in Hungary for the first time brought together the firm's manufacturing and sales organisations in the same subsidiary.

[7] In the general process of increasingly outsoucing components by all major car assemblers Ford pursued a strategy of strategically internalising the production of certain parts, including for example seats, that were previously outsourced.

Ford's USD120 million investment in a greenfield plant on the edges of Székesfehérvár, to the west of Budapest, was agreed at the end of 1989 when the Hungarian government still insisted that foreign firms' investments had a neutral effect on the country's balance of trade (in hard currencies). Thus Ford's access to the protected Hungarian market depended on generating counter-trade by investing in local manufacturing for export. Despite this condition, which begs the question as to whether Ford would have invested in local manufacturing in the absence of the counter-trade rule, some rules on investment had been altered. Thus whereas Suzuki and GM-Opel had been forced to set up joint ventures, Ford was permitted to build a greenfield plant without a local partner. It was this 'freedom' to exclude a local partner which made Hungary the favoured location as it was the only ECE country to allow such an investment at the time. The success of the project depended on Ford's ability to insulate the plant from Hungary's low quality state owned industry. Ford was offered a suitable 'greenfield' site with relatively good communications adjacent to Videoton, Hungary's largest state owned manufacturer of consumer electronic goods and components, with a local labour market over-supplied with skilled engineers and operators.

A further inducement to Ford was the government's offer of a 10 year tax exemption, a deal it had also offered Suzuki and GM-Opel. This was on top of the market access agreement that gave all three investors a 23pc price advantage in the market, in the form of an import duty exemption in return for establishing local manufacturing facilities. However, after the EU complained about 'unfair' market access the Hungarian government removed the advantage for local producers. This

severely harmed Ford since of the three major investors it was the only one without local car assembly capacity and had no way of avoiding import duty. As a consequence Ford complained that the government had disproportionately discriminated against it since Suzuki and GM-Opel continued to enjoy certain tax advantages. In turn the government sought to placate Ford by drawing up regulations for the import of vans which effectively meant that Ford Transit vans could be bought into the country exempt from the duties which applied to similar products. Following complaints from Ford's competitors through the EU the government was forced to withdraw the advantage to Ford which continued to negotiate for compensation from the government.

The factory began producing ignition coils and fuel pumps in early 1992 with a workforce of 120 building up to 500 by 1995. Soon after production began it was decided to add starter motors to the product range. The company also held out the prospect of the eventual production of generators at the factory. The size of the site certainly allowed for a considerable expansion on the 3 million ignitions and 1.4 million fuel pumps that were produced on three shifts. The plant represented a strategic shift by Ford from out-sourcing fuel pumps and ignition coils from suppliers in Japan and Germany to establishing one internal source to supply all of Ford's requirements throughout Europe. This was counter to the general trend amongst car manufacturers of increasing out-sourcing. Thus all production was exported to Genk and Enfield, Ford's two major engine plants in western Europe. In a similar vein late in 1992 Ford announced plans to remove seat assembly from its various vehicle assembly operations in western Europe to one plant in Poland.

Ford used the new plant as a chance to introduce innovative production techniques in the field of production organisation, logistics and the allocation of labour (see also chapter 6). In organising production the management introduced market-type transactions within the plant. Thus different production lines represented distinctive economic units whose performance was judged according to value-added and cost. As a consequence relations within the plant became more visible and governed by the logic (within certain limits) of the market. However, in the field of logistics crude market based relations were somewhat relegated as elements of supplier relationships came to the fore. As a result there was the paradox that within the plant market relations were emphasised whereas its dealings with its suppliers became more hierarchical as elements other than price were included in management calculations.

As all the components were imported and all the output exported the plant was purely an assembly operation. As a result the value-added in the plant was low, with labour costs a mere 4pc and material costs contributing the vast majority of the remainder of the plant's costs. At the time of opening the inputs were sourced mainly from the US (60pc by value), and Japan with only two suppliers in western Europe. Ford established a four person auditing team to inspect Hungarian firms but there was no prospect of contracting Hungarian suppliers which were regarded as years from meeting Ford's standards[8]. The company sought to encourage the localisation of production, but it regarded localisation as production anywhere in Europe. Thus Ford

[8] A number of contracts with local non-production related suppliers had been terminated by Ford.

aimed to have 60pc European content by the end of 1994. Proximity was, however, an important consideration since it believed that close suppliers resulted in lower logistical management and transport costs and a higher level of reliability. In addition, Ford sought to force suppliers to assume more and more responsibility in the production process, even to the extent of suppliers managing elements of the process in its own plant. The rapid development of localisation was promoted by the small number of major suppliers to the plant. As a result the location of only one or two suppliers was needed to achieve the target. Ford approached its suppliers and 'invited' them to consider establishing European (preferably in Hungary) production facilities. The company also began to co-operate with local authorities and a local industrial association, primarily in the production of publicity materials, to promote the local area as a site for inward investment particularly in the auto sector.

At the end of 1992 these efforts culminated in the announcement that the plant's largest supplier, Loranger, accounting for 60pc of the value of all inputs, was to establish a production facility elsewhere in Székesfehérvár. Loranger was a relatively small firm but Ford's single US source of parts for the major components needed to produce ignition coils and had a long tradition of supplying Ford. An indication of the close relationship between the two firms was Ford's participation in the recruitment and training of Loranger's workforce. Despite localisation, it remained to be seen exactly how much value-adding process would be located in Hungary as part of Loranger's investment. What was certain was that whilst Loranger's plant increased the proportion of the process conducted in Hungary, it did not increase interaction with indigenous industry. After all the need to 'invite'

Loranger to locate in Hungary was in large part a reflection of the difficulty in establishing links with domestic producers.

In addition to seeking local supply of parts for the ignition coil, Ford sought to localise the fuel pump production process. Not least the rise in the value of the Yen meant that the parts for the fuel pump, which were all sourced from Japan, increased in price. As a result Ford began to seek suppliers in Spain, Austria and Germany. The company also intended to source all the components for the starter motors from firms in western Europe.

Thus Ford continued to have very few linkages with the local economy and as such resembled a traditional 'branch plant' even if production was divided between two plants owned by two different companies. The course of events also illustrated the changes to supply relationships, in which trust and other non-monetary factors became increasingly significant. This resulted in a 'clan-like' network which posed almost insurmountable resistance to local producers. In this way Ford experimented with new forms of mass production which indicated that the dynamic behind 'localisation' implied that local content might not be an adequate reflection of a firm's local embeddedness. Local sourcing did not necessarily imply a dramatic increase in local value-adding processes. The project also indicated that its stance would have wider effects on Ford's supply base in Europe. Thus the planners responsible for building and managing Ford's new gear box plant at Bordeaux (France) visited Székesfehérvár to learn from the experience of applying new production philosophies in Hungary.

Gelenkwellenwerk Mosel (GWM) - GKN

GKN, the UK's second largest independent component manufacturer, invested in eastern Germany as part of its strategy designed to equip it to cope with the Europeanisation of the car assembly and component sector (Swain 1992a). In the course of this strategy GKN reorganised itself to establish pan-European centres of production which specialised in the manufacture of particular parts for supply to the whole of Europe. In doing so it invested in western Germany to provide a source of drive shafts - in which it was the world leader - for the west European market. Following the socio-economic changes in eastern Europe GKN sought to establish a base to supply drive shafts for the central and east European market.

In early 1991 GKN acquired Gelenkwellenwerk Mosel (GWM) which had been created by the THA by separating it from SAW (physically and legally). GWM had been built and equipped in the early 1980s by Peugeot and as such was SAW's most technically advanced division. However, before GKN's take over, GWM had been incorporated as an independent company with its own management (which had come from SAW) which subsequently hindered GKN's plans. GKN paid the THA DM 4 million for GWM. GWM was one of a very small number of automotive producers in the GDR which had an export market in eastern as well as western Europe. Thus it not only supplied SAW but also Peugeot (a legacy of the GDR having paid for the plant by supplying the French firm), SKODA, ZAZ and ZCZ (amongst others). In addition VW, one of GKN's traditional customers, had already announced its investment next-door at SAW's assembly facility and its intention to

construct a new integrated car manufacturing plant. As a result VW signed a letter of intent with GKN indicating its intention to source driveshafts from GWM for the Mosel plant and also SKODA (by then part of the VW Group).

GKN was thus one of the few investors that acquired a going concern which still had links with the planned auto industry across eastern Europe. Attached to this was a considerable level of risk, for even though the THA used links to eastern Europe as a selling point, the unwinding of the CMEA posed the danger that customers would be lost. In consequence the THA designed a risk-free package for GKN. As a result GKN acquired GWM for DM8 million below the value of the assets - even taking into account the UK firm's willingness to fund 20pc (up to DM300,000) of ecological clean-up costs. In addition, THA assumed GWM's debt liability and offered to fund some capital investment. However, more significantly GKN did not buy the site but leased it from SAW through a property company. Thus although GKN took responsibility for the buildings it did not sink much capital into the project. It was thus in a much better position to divest itself of the plant, without significant costs, if that became necessary. The THA therefore contributed to ensure that any 'investment' remained relatively mobile. Also being an early acquisition from the THA, the privatisation body did not include contractually-binding guaranteed investment and employment levels.

Whilst GKN invested only DM3m of its anticipated DM40 million, it set about reorganising the plant in order to increase efficiency and reduce costs. However, the nature of the restructuring was contradictory. This seemed to indicate

that GKN had not decided exactly how, or indeed whether, the plant would fit into its pan-European production system. Three different development paths were evident. First, the initial plan to develop an east European centre of semi-integrated drive shaft production; second, a revised plan to turn the plant into a relatively low cost parts producer for its drive shaft plant in Offenbach in west Germany; and third, to turn the plant into a dedicated operation to supply just-in-time to VW next door.

The reorganisation took the form of concentration on core operations and the disintegration of the highly vertically integrated production processes. Most importantly, in 1992 it closed the forge and began to source forged parts from GKN's capacity in western Germany and the UK. As a result the number of value-adding processes in the plant was reduced but remained high compared to Ford Hungaria; labour costs were 33pc whereas material costs were 40pc. In addition within the firm the production process was disintegrated, as machines were disconnected to overcome balance-delay problems and devices introduced to ensure that work in process was 'pulled-through'. Despite this, inventories remained large because of past over-buying. However, technical dislocation accompanied the physical concentration of productions as machines were moved closer together and the firm tried to let excess space. Nevertheless, overheads contributed around 30pc of the plant's costs. The overall effect was to replace rigid continuous-flow with more flexible batch production techniques. The organisation of labour was also changed (see chapter 6). As part of this, processes and products were standardised and the number of variants produced was dramatically curtailed. Whereas all these changes could be associated with the first plan (see above) the plant also became increasingly used to supply

simple low value-added parts for assembly at GKN's plants in western Europe. The only substantial new investment, worth DM3m, made by GKN was in the construction of a modern production line to supply VW. The line was designed to produce 1,200 units per day, and thus quadruple the number required for the CKD operation, in keeping with the planned volume of VW's new plant. Overall the results of these changes were substantial cost savings and a doubling of productivity.

Although the project was very different from Ford's in Hungary GKN, like Ford, sought to introduce market-type relations within the plant. As a result the plant was divided into three profit-centres, increasing the transparency of the plant's performance. However, these operated like little companies, sometimes, according to management, at the expense of the plant's overall efficiency. Thus having unleashed market-type forms of co-ordination within the plant the management sought to introduce mechanisms, including workshops, to foster co-operation.

Whilst it reorganised production internally, backward and forward linkages were also altered. GKN's take over and subsequent closure of the forge fundamentally altered GWM's position in the supply chain. Whereas before it had sourced steel directly from producers in eastern Europe it began to source steel from other GKN plants in western Europe. In addition other parts were also sourced from GKN plants. Some other parts were sourced from west German firms and only one major part, a low value added rubber component, was sourced from the new Länder. However, in total there were six suppliers in eastern Germany, three of which were owned, at least in part, by the THA, and the remainder had been acquired by foreign

firms. The high level of supplier turnover permitted GWM to refashion supply relationships. Supply standard became more rigorous and parts delivered more frequently in smaller batches, even though in some instances this was more expensive. In this way the plant became increasingly integrated into a west European supply chain at the expense of 'local' producers. As the standardisation of components across GKN developed this trend increased.

However, its forward linkages remained essentially similar. Foremost amongst the plant's problems was a loss of customers, and irregular orders from those that remained. Thus the break-up of the CMEA system, and war in Yugoslavia, resulted in the loss of all its east European customers except for SKODA. As a result production fell 25pc in 1991 and capacity utilisation fell to between 50 and 60pc. In consequence GWM become increasingly dependent upon orders from Peugeot, SKODA (which began to demand lower VW prices) and VW's CKD operation next door. However, VW's postponement of the new Mosel plant had important implications for the viability of GKN's investment.

GKN was one of VW's eight just-in-time projects which were developed when it began its investment in Mosel (see above). As in the other cases there was no formal contract between them but an understanding based, ultimately, on letters of intent whose value lay not so much in their legal significance as in the trust embodied in them. This form of relationship created problems for GKN because the price was rigidly agreed, including 6pc price reductions per year, but the volume of the orders was not. Moreover costs were increasing. GKN was further weakened in its dealing

because VW had a large capacity to produce the driveshafts in-house at its west German plants if GKN tried to increase the price. This meant that it was difficult to reduce costs without VW noticing and seeking a corresponding price reduction. The result meant VW's part of the bargain was flexible, namely the volume of the order, whereas GKN's, the price per part was not. The proximity of the plants (they were situated side by side with a travel time of half an hour) eased the logistical problems. However, as the relationship developed (in the form of workshops between employees of both firms) it became clear to GKN that VW was more interested in easing its logistical problems even at the expense of increasing their supplier's. Thus the logistical system permitted delivery straight to VW's line eliminating the need for additional handling there, but by doing so demanded additional handling by GKN employees before delivery[9].

GKN was unsuccessful in finding new customers to replace those lost in eastern Europe and instead relied on credit (designed to facilitate trade between the former Soviet Union and eastern Germany) and other forms of financing to maintain, after a fashion, traditional links with ECE. However, in doing so it faced high transaction costs. Logistics became more irregular, owing to variable volumes, and unreliable and consequently more expensive to manage. Thus the plant remained dependent on the remnants of the state planned automotive industry elsewhere in east and central Europe and when orders dried-up it had to make do with lower capacity utilisation. In addition, GWM gradually specialised in producing components for GKN's plants in western Germany and Spain, from which it also received

[9] Only later were measures introduced to alleviate this situation.

components. In this way GWM became integrated into the web of GKN's European production system.

GKN had yet to sink much capital investment in its plant and its future remained in doubt. At the heart of the plant's future lay a paradox. Whereas the plant's management hoped GKN would dedicate GWM to the east European market, eliminating competition from other GKN plants, it feared that in so doing some of its current production would be relocated to higher cost plants in western Europe. However, if competition between GKN plants continued, it remained to be seen whether GKN would permit the relocation of production to GWM even though it had a cost advantage over GKN's plants elsewhere in Germany. Either way GWM depended to some extent on the development of new car capacity in ECE. To that end it began to negotiate to supply Magyar Suzuki, albeit its offer was 25pc above the figure Magyar Suzuki was willing accept.

5.4 Strategies of Hungarian and east German automotive capital: IKARUS in Hungary and Sachsenring in east Germany

IKARUS

IKARUS was one of Hungary's largest and most important companies, employing 10,500 directly and an estimated 90,000 indirectly, and accounting for 15pc of the country's rouble-denominated trade. As a result its restructuring reflected and in turn helped to shape the reorganisation of the entire automotive sector and beyond (see chapter 4). Compared to automotive producers in the GDR, and

elsewhere in ECE, IKARUS had a relatively low level of vertical integration. Thus in the 1980s the cost of purchasing parts amounted to 78pc of the price of the final product (Kapitány 1993). Outsourcing included the external production of the engine and transmission and in total IKARUS had 50 major suppliers in Hungary.

Once the Hungarian state was unwilling to continue to subsidise IKARUS and therefore the price of buses for the Soviet Union, to which 80pc of output had traditionally been exported, the bus maker was forced to try to raise the overall price of its products and secure a greater proportion of that price in order to pay for increasingly expensive components. In the course of 1988 price disputes developed between IKARUS and its suppliers and customers which disrupted production. Under the old system such disputes were overcome by IKARUS supplying kits for local assembly as a way of reducing the price for the customer. However the disintegration of the trading system meant this was no longer feasible, at least in the short term (see below). Thus in 1989 exports to the Soviet Union fell because of the customer's inability to pay higher prices. IKARUS's lower earnings had a negative impact on the entire Hungarian automotive industry. In consequence in 1989 output in the automotive industry fell by around 40pc. At the beginning of 1990 the Hungarian government stopped IKARUS's exports to the Soviet Union which resulted in the halting of production and workers being laid off. The workers and management then began to demand renewed state support to prevent closure. IKARUS, by then bankrupt, was saved by the Finance Ministry which initiated the reflotation of the enterprise in late 1990. This in turn allowed the state a chance to shape the company's future development.

During 1991 the state sought a strategic investor to participate in the reflotation of IKARUS. Mercedes-Benz, MAN, Renault, DAF and IVECO all made bids to take a stake in the 'new' IKARUS. However they were rejected by the government. In addition a bid by a domestic consortium led by RABA (IKARUS's state owned engine supplier) was also rejected. Having failed to find new substantial markets to replace its lost customers in the Soviet Union (Soviet orders fell from 8,900 to 5,000 in 1991), the government decided to accept a Soviet consortium. The consortium was led by ATEX, a holding company of 10 automotive enterprises owned by the Soviet automotive ministry, Avtobank (the state owned auto sector bank), and the Soviet oil, gas and coal industry ministries. The Hungarian government accepted the Soviet consortium believing it most likely to be able to maintain exports to the Soviet Union.

At the end of 1991 the reflotation of IKARUS was complete and the bus maker was transformed into a new joint-stock company with HUF 11.5bn (around USD200 million) founding capital. Although the company retained the name it was not a legal successor and therefore did not inherit any debt liabilities. The 'old' IKARUS Chassis and Vehicle Factory effectively owned a 60.87pc (worth HUF7bn) stake in the new firm. Thus 'new' IKARUS's largest share holder was the technically bankrupt 'old' IKARUS owned initially by the State Liquidation Agency, and then subsequently the State Property Agency (SPA) and the State Holding Company (AV) (see chapter 4)[10]. However, the most important member of the consortium was

[10] The transactions that permitted this were technically complex. Both IKARUS and Csepel Auto, its chassis and gearbox supplier, were liquidated in 1990 under the *de facto* ownership of the

ATEX. It purchased a 30.43pc (HUF3.5 or USD50m) share not in cash but in real estate and service facilities in the Soviet Union[11]. More importantly it helped to secure a guarantee from the Soviet prime minister that the government would order 30,000 buses (plus spares) over a five year period worth in total some USD2.1 billion. The other owners of 'new' IKARUS were the state owned Hungarian Credit Bank (4.35pc worth HUF500m), Mogürt (the former monopoly vehicle retailer and trader) (3.05pc, HUF351m) and a Soviet owned Canadian investment house called the Central European Investment Company (1.3pc, worth HUF149m).

As part of the reflotation 'new' IKARUS was reorganised into a holding company (see fig. 5.1). Its operations were reported to have been divided-up into 16 subsidiaries (see *Business Central Europe* November 1994). This process involved hiving off parts of the production process into 'internal' limited liability companies as a form of decentralised reorganisation (see Stark 1993). Thus companies remained part of the state sphere but operated like private companies with their own boards of directors and balance sheets. As a result relations between subsidiaries were marketised and each one was forced to seek customers beyond IKARUS. As a result of the decentralisation, the 'corporate satellites' pursued different product development and diversification strategies. The bus body manufacturer diversified into the production of chassis and freight containers. In addition the huge press shop began

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State Liquidation Agency (SLA). Subsequently the SLA merged Csepel Auto with 'old' IKARUS to increase its value to permit it to participate in the reflotation. IKARUS thus took over Csepel's factory near Budapest and around 1,200 workers. The merged company was valued by the SLA at USD90 million or HUF7bn (based on a 1990 valuation by Price Waterhouse which was adjusted for inflation). This HUF7 billion was then used to buy a 60.87pc share of the new company which was subsequently transferred to the SPA and then to AV (see fig. 5.1). The former Csepel factory was closed.

[11] ATEX also had an option to increase its stake by 18pc within one year. However, it did not take up the option.

production of automobile components, including small pressed body parts, for Magyar Suzuki. IKARUS's largest subsidiary, IMAG, became closely involved in the supply of various automobile components to Magyar Suzuki and other automotive firms.

Crucially, the reflotation linked IKARUS's future to the maintenance of its traditional trade links with the successor states of the former Soviet Union. In connection with this it was significant that IKARUS's senior management were the same personnel in charge under the planning regime. However, shortly after ATEX's investment the Soviet Union was wound up and succeeded by the Commonwealth of Independent States (CIS). This meant that the Russian authorities became the minority owner of IKARUS and resulted in severe disruption to trade. Most importantly the guaranteed order made by the Soviet prime minister was worthless. In addition, procurement of buses was transferred from a central Soviet agency to 89 regional ones; within months CIS customers had defaulted on their payments. As a result IKARUS repeatedly produced ever more pessimistic business plans. It continued production in the hope that payment would materialise and to meet a few domestic and foreign orders.

However, with its links to the CIS in chaos the company entered into negotiations with Mercedes-Benz which indicated its interest in investing in IKARUS[12]. After two years of negotiations they were concluded without an

[12] Mercedes-Benz was the most active west European commercial vehicles producer in seeking investment opportunities in east and central Europe. However, in addition to its withdrawal from negotiations with IKARUS it also cancelled a planned new plant in eastern Germany (see chapter 4) and pulled out of acquiring two Czech truck makers, TATRA and AVIA.

agreement. This was for two reasons. First IKARUS suspected that Mercedes-Benz wished to eliminate competition from the market and to turn it into an assembly operation importing engine and rear axles utilising Mercedes spare capacity in Germany. IKARUS and the Hungarian government were therefore unwilling to permit Mercedes-Benz to take a majority stake. Second, Mercedes-Benz hoped that IKARUS, with its large sales and servicing network, would enable it to capture a share of the huge potential market in the CIS[13]. Thus once IKARUS's links with the CIS began to break down Mercedes-Benz lost interest in it. Mercedes-Benz withdrawal from negotiations tended to indicate that IKARUS was correct in suspecting that the German firm sought to capture its market and transform it into a low cost assembler. Mercedes did not offer a replacement market for IKARUS. However, the German firm's U-turn also confirmed that IKARUS's value lay in its traditional forward linkages.

Thus IKARUS continued to reduce production, in order to prevent the generation of inter-firm debt, and laid off workers. At the same time it sought harder to identify ways of financing trade with the CIS. It thus abandoned its business plan which involved the export of only 40pc of production to ECE, and 50pc to west Europe, and became increasingly dedicated to the CIS[14]. As a result IKARUS attempted to develop barter trade involving Russian oil and gas. This meant that IKARUS had to find a buyer for the oil and gas, since it had no use for it itself, before it could sell buses to Russia. Exports to the CIS continued to fall, to around 1,000 in

[13] Mercedes-Benz had already begun to assemble a small volume of touring coaches at Golizyno on the outskirts of Moscow but faced difficulties selling them.

[14] The remainder of production was intended for the domestic market.

1992. In 1993 sales to the CIS increased to nearly 2,000,. thanks to a cash payment, but the long term future was insecure.

In consequence IKARUS increased its attempts to maintain links with its traditional market. In early 1993 it announced the intention to open up to 20 completely-knocked-down (ckd) assembly plants across the CIS. Each one was to assemble between 100 and 500 units per year. IKARUS was to supply the assembly technology as part of its contribution to the joint ventures. The joint ventures were then to import kits of IKARUS's cheapest and oldest model in exchange for the export of oil. After assembly the municipal buses were to be supplied to local authorities. It was anticipated that in due course the proportion of locally sourced components would gradually increase. This apparently innovative move, designed to turn it into a multinational company, was in fact a traditional solution to traditional problem; to ease trade in the past IKARUS had established a number of ckd assembly plants in CMEA countries. The first joint venture was established in Kazan in Tartarstan (an autonomous region in the Russian Federation) and was owned by Tartarautrans (69pc), IKARUS (25pc) and CEIC (6pc) (see Kapitány 1993). By the end of 1993 five such ventures had been established, including one in Moscow, with local state owned partners in the automotive or defence industries. However, owing to the old insolvency problems, by November 1994 no kits had been purchased nor assembled in any of the five ventures (*Business Central Europe* November 1994). Moreover, the joint ventures illustrated the way in which nominally 'private' limited liability companies, owned ultimately by the Hungarian and post-Soviet Union states, were established to protect its owners from the spread of the law of value.

In addition to the joint ventures, IKARUS in general illustrated the way state and private property relations had become interwoven and the properties of each dissolved to form 'recombinant' property relations (see Stark 1993). A close examination of IKARUS's ownership structure, its subsidiaries and joint ventures revealed the complexity of the property relations and the blurring between state, private and foreign 'capital' (see Figure. 5.1). Thus, for example, 'new' IKARUS was majority owned by AV Rt. (the State Holding Co.) which like the bus maker had a stake in the Hungarian Credit Bank which in turn had a minority stake in IKARUS and a majority stake in RABA which had a minority stake in GM Hungary. Two other examples of the complex ownership pattern were instructive. First, IKARUS's largest subsidiary, IMAG, in addition to one 'internal' limited liability company and one joint venture (in which IKARUS also had a direct stake), had a minority stake in Autokonzern (IKARUS also had a stake) which had a 40pc share of Magyar Suzuki. Second, the joint venture in Kazan (Tartarstan/Russia) was 25pc owned by IKARUS, 69pc by the Russian state owned Tatautotrans, and 6pc by CEIC the Canadian based Russian investment house which also had a stake in IKARUS.

Although IKARUS's main strategy had been to try all means possible to preserve more-or-less intact the old forward and therefore backward linkages (because of the need to avoid the over engineering of products) it also sought to restructure production so that it could find new customers. In order to attract new customers a sales operation was established and production was reorganised (see also chapter 6). The search for west European customers was accompanied with a shift of emphasis

away from the production of municipal buses toward touring coaches. However, most immediate was IKARUS's need to internalise the sales and marketing function which had previously been done by Mogürt foreign trade company. As a result a number of sales subsidiaries were established including in the UK and Germany. However, they were not successful in winning new market share and IKARUS remained dependent on sales from former CMEA organised by Mogürt.

Assembly line techniques were replaced by dock production and production was largely relocated from its headquarters plant in Budapest to Székesfehérvár. This was part of a centralisation strategy which involved the divestment of two 'branch' plants. These changes permitted greater flexibility (the number of models and variations increased dramatically from the 22 and 86 respectively that were produced in 1988) but it made the intensification of production more difficult to impose.

Equally important was the restructuring of IKARUS's backward linkages as the planned production system was undone. Production of the chassis, which was formerly outsourced from Csepel Auto, was internalised increasing vertical integration to 40pc. In addition, relations between IKARUS and RABA became very strained when the engine supplier quadrupled its prices. As the automotive production system became increasingly disrupted IKARUS's suppliers, many of which only had a minority interest in the auto industry, became less and less reliable. However, without alternative means of supply IKARUS became increasingly dependent on its 50 major Hungarian suppliers which provided 80pc of all inputs.

Gradually, IKARUS tried to alter the power relationship between itself and its suppliers in three different ways. First, it began to increase the frequency and reduce the volume of orders. Generally, the old one year contracts were reduced first six months and subsequently to one month. Second, whereas IKARUS had been compelled to single source components under the planning system, it began to introduce a market by seeking dual sourcing. Thus following Guardian Industries (US) take-over of the Oroshaza Glass Factory in 1989 IKARUS sourced glass from both its traditional supplier, Salgglas, and the joint venture. Third, IKARUS sought to make its suppliers more involved in the automotive sector and thus dependent on the bus maker. In short IKARUS sought to replace hierarchies with market forms of regulation and co-ordination in its domestic supply base. However, this proved a difficult task. First, the reduction in demand for buses meant production was continuously reduced, creating inefficiencies. This in turn threatened the survival of the suppliers which increased IKARUS's dependency on them. Second, the absence of alternative sources of supply hindered the development of competition amongst suppliers. As a result the reliability and the quality of its suppliers remained poor whilst prices spiralled out of control. In an effort to increase reliability IKARUS internalised the import of components from other ECE countries which had formerly been managed by Mogürt, the foreign trade company.

The overall effect was that the marketisation of the supply chain was only partially successful. Although transactions between suppliers were marketised in the sense that prices began better to represent production cost, this was yet to have a significant effect on production relations. This was because the planned production

system became more clan-like and inter-enterprise links remained essentially closed. This was best illustrated by the absence of alternative sources of component supply for models to be exported to the CIS on which IKARUS had pinned its future. Thus the greater the disruption to the production system the more inward looking it became, which made it harder for it to restructure. As a result the production system, including some major suppliers and customers, attempted to *insulate* itself from the effects of marketisation.

However, there was also a counter trend as IKARUS began to import components from western Europe, depending on customer specifications. Non-CIS customers increasingly demanded west European engines, which were sourced from MAN, and chassis which undermined the position of RABA. Other less important components were also imported in larger and larger volumes which made IKARUS less dependent on its domestic suppliers. As a result the local (Hungarian content) fell from virtually 100pc before the changes to between 55 and 95pc depending on the model and customer specifications. The average value of imported components was 25pc. In addition, IKARUS set up a joint venture in the US which produced IKARUS models but with 60pc US content. There was a danger then that IKARUS would become increasingly confined to assembling buses whose major components were imported. To prevent that it entered in negotiations with Renault to permit the local production of its engines, chassis and gearboxes. However, without an increase in orders from new customers, integration into the west European sector would remain marginal to IKARUS's operations.

In the course of the early 1990s, IKARUS attempted to marketise its operations but essentially remained wedded to the legacy of the plan and tried to insulate itself from the law of value. This seemed likely to continue since Russian authorities had purchased an option to take a majority stake in 'new' IKARUS which hindered attempts to attract a strategic investor from western Europe or North America. In addition the state indicated that it would retain a 25pc stake and a 'golden share' to veto any strategic investors' plans. However, at the same time there was significant decentralised reorganisation which indicated the contradictory development of IKARUS. First, decentralised reorganisation reflected and in turn shaped the establishment of increasingly clan-like closed linkages which made the production system *resistant* to the more far-reaching effects of marketisation, namely the restructuring of production relations. Second, decentralised reorganisation also involved the selective and partial intensification and restructuring of productive relations as marketisation impacted upon the conduct of production. However, it remained to be seen whether the coexistence of these trends would be sufficient to facilitate the evolution.

Sachsenring Automobilwerke Zwickau GmbH

In contrast to the restructuring of IKARUS, the manufacturer of the Trabant was centrally reorganised by the THA, but the outcome, decentralisation, was to some extent similar. However, whereas decentralised reorganisation at IKARUS reinforced the legacy of the plan as a co-ordinating mechanism, at Sachsenring decentralised reorganisation represented the disintegration of the enterprise and its selective reintegration into the German and west European auto industry. In mid-1990

Sachsenring Automobilwerke (SAW) was transformed into a wholly owned limited liability subsidiary of IFA-Kombinate, which was owned by the THA. The THA, increasingly under the influence of the West German state as unification approached, then began to shape the development of SAW by gradually limiting the strategic development options open to it. Even before the unification of Germany the THA had effectively begun to preclude certain development paths and in the course of the early 1990s slowly narrowed SAW's strategic choice and ultimately forced it into liquidation.

In keeping with the system of industrial Kombinate, SAW was rigidly integrated in at least two senses. First, as a major component of IFA-PKW, the passenger car division of the IFA-Kombinate, SAW was very tightly tied to the national automotive production system; although raw materials were imported no components were (see chapter 4). Thus its engines were sourced from IFA-PKW's plant in Karl-Marx-Stadt. Only glass, some lighting products and rubber parts were sourced from other Kombinate. In total 80pc of parts were supplied by IFA-PKW plants. Second, SAW was internally highly vertically integrated, producing around 60pc of the parts, with four plants in and around Zwickau.

At the beginning of 1990 SAW's most modern production facility, an assembly line at Mosel, was hived off by the THA to establish Sächsische Automobilbau (SAB), a joint venture with VW Group in which the Treuhand had a majority stake (see above). In May 1990 this plant began to alternate assembly of ckd VW Polos and Trabants until April 1991 when production was switched to the Golf

(Mark 2). At the end of 1990 SAW's second most modern plant, built by Peugeot in the early 1980s to produce drive shafts, was demerged to form Gelenkwellenwerk Mosel (GWM). At the beginning of 1991 GKN purchased GWM from the THA (see above). It was only after these important changes that the west German state reneged on its initial intention to subsidise continued production of the Trabant. However, the restructuring of the production system, in which new property relations were established in some elements of the production chain, undermined any remaining coherence of the system. As a result the production system became unworkable. As a result the state, through the THA, merely formalised the process of disintegration from below which resulted from the THA's decision to terminate production of the Trabant and its privatisation strategy of breaking up the IFA Kombinate. Politically the course of action was only possible because the state had secured a commitment from VW to invest in the local area and in the short term, at least, Sachsenring.

SAW was separated from the IFA-Kombinate (which became an empty holding company and was liquidated) and renamed Sachsenring Automobilwerke Zwickau (SAZ). It remained 100pc owned by the THA. However, whereas the THA created new companies (not legal successors) for acquisition by private investors and where necessary shouldered debt liabilities, SAZ was not a new company. Rather SAZ was a legal successor of SAW and as a result inherited SAW's DM600 million debt[15]. It thus seemed that the THA was intent on using SAZ as a 'sink' in which to deposit liabilities whilst at the same time selling its most attractive assets, with minimal attached risks, to private investors. In addition, many investors chose not to

[15] Subsequently the THA offered to shoulder half of SAZ's debt liabilities.

acquire real estate and buildings but instead lease them from Sachsenring. In this way the THA allocated risk to SAZ and minimised it for investors since they were able to 'sink' less investment into their projects.

In the course of 1991 production of the Trabant was halted. At the same time the workforce was reduced to 1,600 employees and a labour dispute resulted in the formation of an 'employment company' (see chapter 6). As a result SAZ made a DM70 million loss on a turnover of DM360m. At the same time there were a series of further demergers as automotive components firms, including Siemens, Dr. Melegy and Naue-Johnson and a number of engineering service firms, purchased SAZ assets (see Figure 5.2). By the end of 1991 more than 10 (excluding the 'employment company') auto-related firms had acquired or leased SAW buildings. These firms employed 4,047, of which 2,400 worked for SAB-VW Sachsen. In total 19 private companies - some established by foreign investors and some newly created - had acquired SAZ assets by March 1992 (see THA 1992). This involved the sale of 164,000m^2 of SAW's site and the leasing, via a property company, of a further 68,000m^2. Gradually, from having had four plants (three in Zwickau and one 10km to the north in Mosel) SAZ became confined effectively to just one. The Mosel site was occupied by SAB-VW Sachsen and GKN and the VW-Bildungsinstitut (and employment company) occupied a further site in Zwickau itself. A third site was *de facto* transformed into an automotive industrial park by the THA, including for example Siemens. Even portions of SAZ's remaining site were sold and leased to other firms.

SAW was thus divided into two: a core business owned by the THA and SAZ, dependent on VW and, secondly, an industrial park comprising mostly auto-related private firms. However, the new companies did not represent the privatisation of portions of SAZ but effectively their liquidation and the sale of assets (without liability) to new firms. Crucially, then, the parts of SAZ that were privatised were not sold as going-concerns with liabilities and obligations but as 'hollowed-out' assets which became branch plant facilities belonging to foreign automotive firms. As a result the facilities which had formerly been linked together within the enterprise by the plan, were untied from one and another and were acquired by new companies which integrated them into German and European production systems. In this way a local production system, albeit within one enterprise, was dislocated through the process of privatisation. However, although this was the trend there were some local linkages between the new companies. Nevertheless, these were limited in scope and scale and centred not around SAZ but around SAB-VW Sachsen (see Figure 5.2).

Following the end of Trabant production, the core business sought to identify new business activities. Increasingly it became dependent on the investors which had purchased its assets, and VW in particular. In order to begin production of the Golf II VW required local body assembly facilities. Not only was this a politically-motivated requirement but it also served to reduce production costs given the large transport cost of shipping complete bodies from Wolfsburg, which in any case was operating at full capacity. Thus SAZ was used to assemble car bodies from panels pressed in Wolfsburg and the THA sanctioned a DM 70 million investment in the necessary technology. Supply commenced in mid-1991.

At the same time the THA sent in various teams of consultants to audit and reorganise the company's profile. This resulted in the division of SAZ into four profit centres at the beginning of 1992 (see THA 1992). The automotive engineering profit centre was the enterprise's largest, accounting for 75pc of SAZ's turnover. It specialised in three activities; body assembly for VW Sachsen (from parts supplied by VW Wolfsburg), engine and transmission manufacture for several VW plants in western Germany, and the subassembly of 60 different small components for VW Sachsen (mostly involving the assembly of parts shipped from other VW plants). The second largest profit centre, contributing 12pc of the enterprise's turnover, concentrated on the production of technically simple manufacturing equipment for automotive firms. This profit centre was also dependent on sales of equipment to VW and other private companies that had established production in SAZ's former buildings. The third profit centre, providing 8pc of the enterprise's turnover, produced spare parts for the Trabant for the ECE aftercare market. The smallest profit centre, which accounted for 5pc of turnover, specialised in industrial planning and service functions. Essentially this profit centre acted as a general contractor and project manager for the investors, including VW, on SAW's former site.

Thus at the beginning of 1992 the supply of parts and equipment to VW accounted for 82pc of SAZ's turnover. In addition a further 5pc was earned from its project management business for, amongst others, VW. More importantly although SAZ had partially replaced production of the Trabant, albeit with 15pc of the original workforce, it had done so at the expense of losing its manufacturing depth and

value-adding processes and had become a subassembly plant for VW's loss making politically motivated investment in Mosel. Effectively, therefore, SAZ had been forced by the THA into a position where it was entirely dependent on VW which procured around DM150 million worth of components from it per year. At the same time the relationship that developed between SAZ and VW, structured by the THA, was organised along a *bureaucratic* rather than a market dynamic. Thus SAZ had not secured VW's custom in the 'normal' way. It had not been audited in the way VW suppliers were usually and had not sought a contract. Rather for national and local political reasons VW 'put out' work to SAZ in order to 'support' it. As a result SAZ resembled a subcontractor of VW rather than a supplier. But crucially it allowed VW to demonstrate that it was committed not only to the region (see above) but also to east German suppliers. It also neatly fitted into VW's view at the time that logistical efficiency required Toyota-like clustering of suppliers around the assembly plant.

VW's close engagement with SAZ led Sachsenring's management and workers alike to regard the assembler as a partner and an ally. As a result it was widely believed in both companies that VW Sachsen would eventually incorporate SAZ[16]. However, in early 1992, VW announced plans to switch production from the Golf II to the Golf III. This decision meant that SAZ's DM 70 million investment, less than a year earlier, became obsolete and worthless and increased its debt to around DM700m. Moreover, the change in production accompanied the partial opening of VW's new body shop, part of the Mosel II complex. In consequence VW internalised body construction. At a stroke SAZ lost the majority of its turnover. It continued to

[16] This expectation emanated from VW management which responded to its workers' concerns about their former colleagues at SAZ by indicating that it would look favourably upon them.

supply an assorted range of minor subassemblies, such as the steering column and floor parts, to VW Sachsen. However, even this business reduced in volume as more elements of the production process were internalised in order to prevent redundancies at VW's plants following recession in the car market. Moreover, in early 1993 VW purchasing strategy was altered and the emphasis placed upon local suppliers was reduced (see above). Any possibility of increased procurement from VW in the medium term was dashed with the announcement that the complete opening of Mosel II would be postponed.

As a result VW no longer had a logistical need for SAZ and the political imperative that existed before was no longer as significant since VW's investment in the area was so visibly demonstrated by the half-built Mosel II plant. In the course of 1993 VW's procurement from SAZ gradually declined. In consequence SAZ's capacity utilisation fell and more of the 1,600 workers were put on short-time working. This was also because SAZ was unsuccessful at securing new customers. In addition, one plan to begin Trabant production in South America did not materialise. SAZ did however begin to develop a vehicle customisation and car recycling business. By the beginning of 1993 the THA became convinced that SAZ could not be sold as a going concern. It estimated that the cost of cleaning up the environment at SAZ's site was DM110 million. Moreover it anticipated that investment of DM 280 million was required in order to transform SAZ into a modern viable automotive component supplier. Following the failure of a Management-Buy-Out SAZ was placed into liquidation and some assets were bought by a western investor which guaranteed to employ at least 280 workers.

5.5 Conclusions

Marketisation and the disintegration of the planning system were deeply bound up together. The uneven development of markets undermined the integrity of the planning system, which encouraged enterprises to pursue divergent strategies. In consequence enterprises ceased to be governed by the plan. This left producers isolated from production systems which ceased to function adequately. There was thus a lack of any mechanism to co-ordinate enterprises. In Hungary producers were permitted to continue in business whereas in east Germany the industry was undone. At the same time foreign automotive capital flowed into both countries. The investment was crucial in shaping the industrial and regional development of the host regions through their integration into German and European production networks.

In Hungary, with the exception of Suzuki, investment by-passed the indigenous sector and established a number of low-cost 'greenfield' component plants integrated into pan-European production systems. Suzuki's relations with the indigenous sector only served to illustrate the problem of trying to restructure production in enterprises cast adrift from the plan and deserted by the state. The path of change in east Germany was altogether simpler. The production system was dismantled by the west German state and replaced by a foreign one transplanted from west Germany.

There were two types of investment strategy: those which sought to create regional production systems and those which resembled branch plants. However, a

close examination of Suzuki and VW's investments showed that even localised production systems were unlikely to provide a significant engine for local economic development. Thus it seemed likely that localised production systems would be as disembedded as branch plants were. This was for three reasons. First, even when local suppliers were taken into account the local production systems represented relatively low value adding chains in comparison to conventional automobile assembly plants. Second, supplier relations were 'clan-like', with indigenous firms excluded. Third, in practice localisation meant at the continental rather than the local, regional or national scale. This did not augur well for major local producers. In Hungary disembedded foreign investment forced indigenous enterprises to seek means of preserving and recreating traditional inter-firm links. In doing so they became increasingly marginalised. In east Germany, the state merely dismantled enterprises. Overall the disintegration of the planning system and the subsequent reliance on automotive DFI transformed production systems into 'global outposts' of international production networks.

Table 5.1 **An overview of automotive DFI in Hungary and eastern Germany**

	Hungary	**eastern Germany**
Automotive DFI (USDm)	1,461.3	5,466.5
pc of total DFI	16	nd
auto DFI per capita (USD)	140.9	339.5
projects	29	73
employment	24,284* (incl. 7,140 new jobs)	22,878

*Note: figure includes non-auto related employees in enterprises the target of auto investment.

Source: various

Table 5.2 **A summary of foreign automotive investment in Hungary and eastern Germany** (USDm)

	Car assembly	pc of total	car components	pc of total	other (CVs)	pc of total	Total
Hungary	302	21	1,099.3	76	50	3	1451.3
eastern Germany	3,580	65	1,234.5	23	650	12	5,466.5

Note: The table includes only those projects for which information on the value of investment is available.

Source: various

Table 5.3 **Foreign automotive investment in Hungary and eastern Germany by country of origin (USDm)**

Country of origin	Hungary	pc	Eastern Germany	pc
US	923.4	64	499	9
West Germnay	229.6	16	4,873	89
Japan	236.5	16	0	
Russia	50	3	0	
UK	3.8	...	45	1
France	0		48	1
Other	8	...	0	
Total	1451.3		5,466.5	

Note: The table includes only those projects for which information on the value of investment is available.

Source: various

Table 5.4 **Automotive component DFI in Hungary and eastern Germany by sector**

Sector/part	Hungary			Germany		
	$m	pc	jobs	$m	pc	jobs
Engines/parts/clutches etc	347.6	32	410	483	39	2,223
Electrical parts/lighting	556.6	51	1,630	178.5	14	2,670
Glass	120	11	250	42	3	906
Tools				124	10	1,200
Rubber parts	55	5	70	100	8	906
Seats				49	4	560
Friction products	6	1	nd	12.5	1	600
Suspension/steering	9.8	1	nd	44	3	1,110
Cast/forged/pressed parts	2		350	50	4	1,278
Batteries				40	3	640
Exhaust/welded parts				24	2	450
R&D				12	1	200
CV components				26	2	734
Logistics				10	1	72
Other	2.3		30	39.5	3	825
Total	1099.3			1,234.5		

Note: The table includes only those projects for which information on the value of investment is available.

Source: various

Table 5.5 **Investment in automotive assembly in Hungary**

Company	Partner	Location	Activity	Workforce target	Workforce actual	Share (pc)	Value ($m)
Suzuki (Jap.)	Autokozern, C.Itoh & IFC	Ezstergom	assembly of 60,000 Swifts	1,300	500	40	235.0
GM Opel (US)*	RÁBA	Szentgotthárd	assembly of up to 35,000 Astras & 400,000 engines	1,050	500	67	200.0
ATEX (Russia)	IKARUS	Budapest & Szekesfehevar	Autobus production		8,500	12	50.0

* Includes $133m investment in engine assembly.

Source: various

Table 5.6 Investment in the automotive component sector in Hungary

Company	Partner	Location	Activity	Workforce target	Workforce actual	Share (pc)	Value ($m)
GE (US)	Tungsram	Budapest	automotive lighting		8,000	100	350
VW Audi (Ger.)		Györ	1,000 5-valve cylinder heads p.d.	800	200	100	213
Ford (US)		Székesfehérvár	3m ignition coil, 1.4m fuel pumps, & starter motors	500	150	100	120
Guardian Industries'		Oroshaza	131,000t automotive float glass		250	100	120
Columbian Chemicals Corp. (U.S.)	Tisza Chemical (TVK)	Tiszaújvaros	55,000 tonnes black carbon mainly for automotive rubber parts		70	60	55.0
ITT Automotive		Vesprém	cabes, switches & ABS sensors	400	200	100	40
UTA (US)		Gödöllö	wiring harnesses and cables	1,000	300	100	20.0
Loranger (US)	SPA	Székesfehérvár	Fuel pumps & coils for Ford's adjacent component plant and its other in Europe		250	30	10.1
ACG Packard Electric	Villszov	Szombathely	automotive cable systems	600	380	100	8.3
Michels & Co (Ger.)		Mór	greenfield wiring harnesses factory	700	350	100	8.3
Linamar Corp (Can)	L a & SPA	Oroshaza	servo brakes for N. American market				6
Diakan and C.Itoh (Jap)	Bakany	Tatabanya	50,000 clutches p.a.		10	40	1.5
BPW (Ger.)	RÁBA	Szombathely	200 running gears p.d. & components for trailers			75	6.0
David Brown Vehicle	Ganz Machine	Budapest	driving gear systems			51	3.8

Company	Partner	Location	Activity	Workforce target	Workforce actual	Share (pc)	Value ($m)
Transmissions (UK)	Work						
AMAG (Austria)	Qualital Metal Foundary	Apc	1,000 tons of tools & castings		350	60	2.0
Kühlerfabrik Längerer & Reich/ Industrievertretungsgesellschaft Hofmeister & Rumpf (Ger.)	Small Engine and Machine Factory	Mezökövesed	252,800 radiators for buses and trucks				1.3
Hoppich (Ger.)	Pemu	Solymar	sunvisors		30	51	1
Kromberg-Schubert (Aus.)	local partner	Koszeg	wire harnesses for Mercedes Benz				
Frimo (Ger.)	IMAG	Mor	plastic dashboard				
Turkish consortium (Tur.)	IKARUS	Budapest	coaches		200	min	
Akzo	TVK	Tiszaujvaros	paint				
EsCade Ltd (US)	SZIM	Budapest	components & machine tools		200		
Knorr-Bremse (Ger.)	SZIM	Kecksemét	breaks for C.V.s			74	
SEPI (Fr.)	Elzett	Sopron	locks			100	
Banking consortium led by Creditanstalt (Aus.)	Graboplast	Györ	seat covers for VW		1,300	35	
Leonische Drahtweke (Ger)	Vilati Automatic Co	Eger	cables for Audi cars			Ger maj.	

Source: various

Table 5.7 **Planned investment and employment in the Hungarian automotive sector**

No. of investments	planned emplyment (n=20)		of which new jobs (n=18)		investment ($m) (n=20)
	target	actual	target	actual	
29	24,284	21,340	7,140	3,370	1461,3

Sources: various

Table 5.8 International co-operation projects in the Hungarian automotive industry

Company	partner	location	activity
Houwa Kogyo (Jap.)	Imag (licence)	Mór	100,000 seats, also doors and roof linings for Suzuki
Furukawa Battery Co (Jap)	Perion (licence)	Budapest	license to produce 50,000 batteries for Suzuki
Nippondenso (Jap)	MMG (license)	Budapest	license to produce 50,000 dashboards for Suzuki
Nippondenso (Jap)	Autoville (license)	Budapest	license to produce 50,000 starter motors for Suzuki
Showa (Jap.)	Berva (licence)	Eger	200,000 shock absorbers for Suzuki
Mitsuba (Jap.)	Bakony (licence)	Veszprém	produce, under licence, of horns and motors for windcreen wipers to Suzuki
Sumitomo Wiring Systems (Jap.)	Imag (licence)	Mór	wiring harnesses for Suzuki
Nippondenso/Sumitomo?	Ganz KK (license)	Budapest	electrical parts (switches, controls)
Fridez Solar AG (Swiss)	Hodgep	Hodmezovasarhely	assembly of small electirc car
Jurid (Ger.)	Caroflex (license)	Kisvárda	pairs of asbestos-free brake liningsby-back 2.5m units p.a. for 6 years
Reis (Ger.)	Zalaform		zips for seat covers for Suzuki
Edgar Emele (Austria)	SZIM	Budapest	components
VW (Ger.)	RÁBA	Györ	assembly of VW light commercial vehicles
MAN (Ger.)	RÁBA	Györ	assembly of lorries 6-10t trucks and engines
Isuzu Motors (Jap.)	RÁBA	Györ	assembly of light commercial vehicles

Source: various

Table 5.9 **Planned investment and employment in the Hungarian automotive sector by county, 1993**

County	No. of projects	Planned employment	of which new	Investment
Budapest	5	15,000 (n=4)	0	403.8 (n=3)
Pest	2	1,030 (n=2)	1,030	21 (n=2)
Nógorád	0			
Borsod-Abaúj-Zemplén	3	70 (n=1)		56.3 (n=2)
Szabolcs-Szatmár	0			
Hájhdú-Bihar	0			
Békés	2	250 (n=1)	(nd)	136 (n=2)
Csongrád	0			
Bács-Kiskun	1	(nd)	(nd)	(nd)
Baranyi	0			
Somogy	0			
Zala	0			
Vas	4	2,150 (n=3)	2,150	214.5 (n=3)
Györ-Sopron	3	2,100 (n=2)	800	213 (n=1)
Komáron	2	1,310 (n=2)	1,310	236.5 (n=2)
Heves	2	350 (n=1)	0	2 (n=1)
Szolnok	0			
Tolna	0			
Veszprém	1	400 (n=1)	400	40 (n=1)
Fejér	4	1,450 (n=3)	1,450	138.4 (n=3)
Total	29	24,110 (n=20)	7,140	1,461.5 (n=20)

Source: various

Table 5.10 **Planned investment by west German industry in east Germany 1992**

Sector	Percentage
Automotive	20
Electrical/electronics	17
Chemical	13
Machine tools	12
Food	11
Other	27
Total	100

Source: Institut der deutschen Wirtshaft, Köln in VDA 1992a, 4.

Table 5.11 **Planned investment by the west German automotive industry in east Germany**

Year	Investment (DM billion)
1990*	0.25
1991*	1.5
1992	3.2
1993	2.8
1994	2.7
1995	1.3
1996	1.0
Total	12.75

* actual figures

Source: after VDA 1992a, 4

Table 5.12 **Investment in automotive assembly in eastern Germany**

Western Firm	Partner/Target	Activity	Location	Planned workforce	Value/ Investment
VW	IFA-PKW-SAW	automobile assembly	Mosel (Saxony)	5,800	3-5bn
Mercedes Benz	IFA	C.V. assembly	Ludwigsfelde (Bran.)		650m
GM	IFA-PKW-AWE	automobile assembly	Eisenach (Thür.)	2,000	450m

Source: various

Table 5.13 Planned investment in the automotive components industry in east Germany

Western Firm	Partner/Target	Activity	Location	Planned workforce	Value/ Investment USDm
VW	IFA-PKW	engines	Chemnitz (Saxony)	550	400
Bosch	FER	electrical components	Eisenach (Thür.)	2,200	167
Pheonix	Gummiwerke Thüringia	rubber parts	Waltershausen (Thür.)	1,000	86
BMW		large tools	Eisenach (Thür.)		67
GKN	GWM	drive shafts	Mosel (Saxony)	800	34
St. Gobain (Fr.)	Flachglas Torgau	glass	Torgau (Saxony)	750	34
Benteler	AWE	dies, mouldings & pressed parts	Eisenach (Thür.)	700	34
Lear Nosag		seats	Eisenach (Thür.)	250	34
Webasto	VEB Sirokko-Geräte	climate control	Neubrandenberg (M.-V.)	320	27
ZF Friedrichshafen	IFA-Getriebewerk	gears for ligh C.V.s	Brandenberg (Bran.)	734	26
Hoppecke	GAZ	batteries	Zwickau (Saxony)	340	20
Peddinghaus	Pre- und Schmiedewerk	free & dropped forged parts	Brand-Erbishof (Saxony)	550	20
Dr. Meleghy	Prewerke SAW	Dies, mouldings & pressed parts	Zwickau (Saxony)	400	20
Varta	GAZ	batteries	Zwickau (Saxony)	300	20
MEFRO	Räderwerk Ronneberg	steering, tow bar, & tools	Ronneberg (Thür.)	200	17
Scherdel	Ferdernwerke Marienberg	suspension	Marienberg (Saxony)	650	17

Western Firm	Partner/Target	Activity	Location	Planned workforce	Value/ Investment USDm
Mann & Hummel	Plasta	air filters	Sonneberg (Thür.)	213	14
Freudenberg	Polymant Gummiwerke Berlin	springs, rubber parts	Berlin	300	14
Valeo'	Renak-werk	clutches	Reichenbach (Saxony)	130	14
Karosseriewerke Weinsberg	Blechformteile Erzgebirge Bernsbach (Co-op)	production & assembly of body parts	Stollberg (Saxony)	375	14
Gillet	HAZET Kraftwagenwerk	exhausts	Zwickau (Saxony)	200	14
Eckard design	IFA-PKW-AWE	research and development	Eisenach (Thür.)	200	12
Spedition Rolf Schnellecke	IFA-PKW-SAW	`JIT' delivery & logistics	Zwickau (Saxony)	72	10
Hohe Schleiz	Blewa		Schleiz (Thür.)	400	10
Leistritz	Blechformwerke Bernsbach	exhausts & welding	Stollberg (Saxony)	250	10
Siemens & VW	Werk 2 IFA-PKW-SAW	sub-assembly of electrical components	Zwickau (Saxony)	300	8
Pilkington (UK)	Akener Flachglaswerk	glass	Aken (S.-Anhalt)	156	8
Teves	Eisenhammer, Dresden (co-op)	breaks	Reichenbach (Saxony)	250	7.5
FAG	Möve	break, clutch and engine parts	Mühlhausen (Thür.)	130	7.5
AL-KO Kober	Stodämpfer	shock absorbers, suspension, tow bars	Hartha (Saxony)	200	7.5
Naue/Johnson (USA)	Werk 3 IFA-PKW-SAW	seats	Zwickau (Saxony)	240	7.5
Pierburg	VEM Elektromotoren Junkalor	engine components	Dessau (S.-Anhalt)	200	7.5

Western Firm	Partner/Target	Activity	Location	Planned workforce	Value/ Investment USDm
F.S. Fehrer	Elguwa	upholstry	Leipzig (Thür.)	70	7.5
Behr Industrie-technik	Apparatebau	fuel tanks & climate control	Mylau (Saxony)	250	5
Rütgers Pagid	Cosid	breaks	Coswig (S.-Anhalt)	350	5
Droege	Metallweren-fabrik	small pressed parts	Beierfeld (Saxony)	100	5
T & N (UK)	Infesto	piston rings	Dresden (Saxony)	200	3
Siebenwurst Werkzeug-bau	Werkzeugbau Trabant	machine tools	Zwickau (Saxony)	100	3
Hirschvogel	IFA-PKW-AWE	dropped forged parts	Eisenach (Thür.)	120	3
Benteler-AWE		pressed parts	Zwickau (Saxony)	33	3
Beru	Elektrokeramik	spark plugs & ignition	Sonneberg (Thür.)	100	2
Autoliv	Döbelner Beschläge- und Metallwerk	seat belts	Döbeln (Saxony)	60	2
Hella		front-end module	Meerana (Saxony)	32	1.5
Radsystem		wheels	Zwickau (Saxony)	25	1.5
VDO		instrumentation module	Glauchau (Saxony)	70	1
Brose		suspension	Gera (Thür.)	35	1
T & N (UK)	Gleitargerwerk Osterwieck	bearings	Osterwieck (S.-Anhalt)		1
Allibert		internal panels	Meerana (Saxony)	13	1
Daros	Infesto	pistons rings	Dresden (Saxony)		
Honsel-Werke	Räderwerke Ronneberg (co-op)	steel rims	Ronneberg (Thür.)		

Western Firm	Partner/Target	Activity	Location	Planned workforce	Value/ Investment USDm
ITT (USA)	Renak-Werke		Riechenbach (Saxony)		
Karman	Karosseriewerk (co-op)	body parts	Dresden (Saxony)		
Kögel	Fahrzeugwerk	trailers	Werdau (Saxony)		
Kolben-schmidt	Metallwerke (co-op)	cylinders	Harzgerode (S.-Anhalt)		
Kostal		tools	Pirna (Saxony)	93	
Krupp Brüning-haus	Roweiner Schmiede- und Federnwerke (co-op)	suspension & forged parts	Rowein (Saxony)		
Lemmerz-Werke	Räderwerk Ronneberg	steel rims	Ronneberg (Thür.)		
Dr. Miletzer	IFA-PKW-AWE	gears	Eisenach (Thür.)		
Neoplan	Vogtland Automobile	chassis, sub assembly & delivery	Plauen (Saxony)	240	
Neoplan			Ehrenhain (Thür.)		
Philips Licht (Neth)	Narva Speziallampen	lamps	Plauen (Saxony)		
RHW	Fahrzeugwerke Werdau (co-op)	seat parts	Werdau (Saxony)		
Scanrup	Reifenwerk	re-moulding tyres	Oraneinburg (Bran.)		
SKF (Swe.)	Wilischthal-Werke (co-op)	assembly equip., small engine parts	Marienberg (Saxony)		
Sedlmayer	Lenkgetriebe Triptis (co-op)	steering gear	Triptis (Thür.)		
Thyssen	IFA-Prewerk	pressed parts for VW Golf II	Ludwigsfelde (Bran.)		
VDO	VEB Beierfeld		Beierfeld (Saxony)		

Western Firm	Partner/Target	Activity	Location	Planned workforce	Value/ Investment USDm
VW	IFA-PKW	cylinder heads	Eisenach (Thüringia)		
Witzen-mann	Metallschlauch-werke (Zwickau) & Rohrleitungsbau (Werdau)	metal parts	Zwickau & Werdau (Saxony)		
Zipperle	Karosseriewerk Dresden	accessories	Dresden (Saxony)		

Source: after *Automobil-Produktion* 1992, 55-6, author's estimates

Table 5.14 **Planned investment and employment in the east German auto sector by Länder**

State	Total no. of Projects	Planned workforce	Planned Investment ($ millions)
Saxony	41	13,323 (n=30[+])	3,814 (n=28)
Thüringia	21	7,618 (n=14)	912 (n=15)
Saxony-Anhalt	5	706 (n=3)	21 (n=4)
Brandenburg	4	734 (n=1)	676 (n=2)
Mecklenberg-Western Pomerania	1	320 (n=1)	27 (n=1)
Berlin	1	300 (n=1)	14 (n=1)
Total	**73**	**23,064 (n=50)**	**5,464 (n=51)**

[+]Refers to the number of projects for which there is information.

[*]The decision by Mercedes Benz to postpone the construction of a new truck assembly facility reduced its likely medium term investment in east Germany to DM1bn.

Sources: after *Automobil-Produktion* 1992, 55-6, author's calculations

Table 5.15 Suzuki's major local suppliers

Company	Product	Location
IMAG	seats, wiring harnesses, door and roof linings	Mor
Perion	batteries	Budapest
Berva	shock absorbers, parts for seats	Eger
Pemu	plastic moulded parts	Solymar (near Budapest)
Bakony	windscreen wipers/motors, horn	Vesprem
MMG	dashboards	Budapest
Akzo-TVK	paint	Tiszaujvaros
Daikin-Bakany	clutches	Tatabanya
Autoville	starter motors, generator	Budapest
Ganz KK	electrical switches/controls	Budapest
IKARUS	small black pressed steel parts	Budapest
Elzett	locks	Sopron
Caroplex	plastic moulded parts	?
Tatabanya Spring Manufacturing	springs	Tatabanya

Source: various

Table 5.16 **Automotive component firms in the Zwickau Region**

Firm	town	Product	VW Mosel supplier	employees (planned)	investment (planned) USD
GKN-GWM	Mosel	driveschafts	yes	690	34
Hoppecke	Zwickau	batteries	no	340	20
Varta	Zwickau	batteries	no	300	20
Siemens	Zwickau	cable	yes	300	8
Dr. Melegy	Zwickau	pressed parts	no (but supplies other VW plantrs	240	20
Leistritz	Stollberg	dampers	yes	175	10
Gillet	Zwickau	exhaust parts	no	140	14
Naue-Johnson	Zwickau	seats	yes	135	7.5
VDO	Glauchau	dashboard/instrumentation	yes	70	1
Benteler	Zwickau	pressed parts	yes	33	3
Hella	Meerana	front-end	yes	32	1
Radsysten	Zwickau	wheels	yes	25	1
Allibert	Meerana	internal panels	yes	13	1.5
Total			10	2,493	141

Sources: various

Table 5.17 **VW Sachsen's modular just-in-time suppliers (as of 1993)**

Company	module	town	kms from assembly plant	employees on module	investment (DMm)
GKN-GWM	driveshaft	Mosel	0	60	3
VDO	instrumentation	Glauchau	4	70	4.9
Naue-Johnson	seat	Zwickau	10	135	3.5
Benteler-AWE	engine frame	Zwickau	10	33	4.9
Radsystem	wheel	Zwickau	12.6	25	2
Hella	front-end	Meerana	15	32	2
Allibert	internal panels	Meerana	15	15	2
Leistritz	dampers	Stollberg	38	10	3
Total				380	25.3

Note: In addition Logistic Centre Glauchau was established and owned by suppliers from where the logistics of eight parts (including internal panels, bumpers, drive train parts, floor covering, filters etc.) were managed, stored and then delivered just-in-time to Mosel, just 4km away. It employed 100 people and invested DM3.5m.

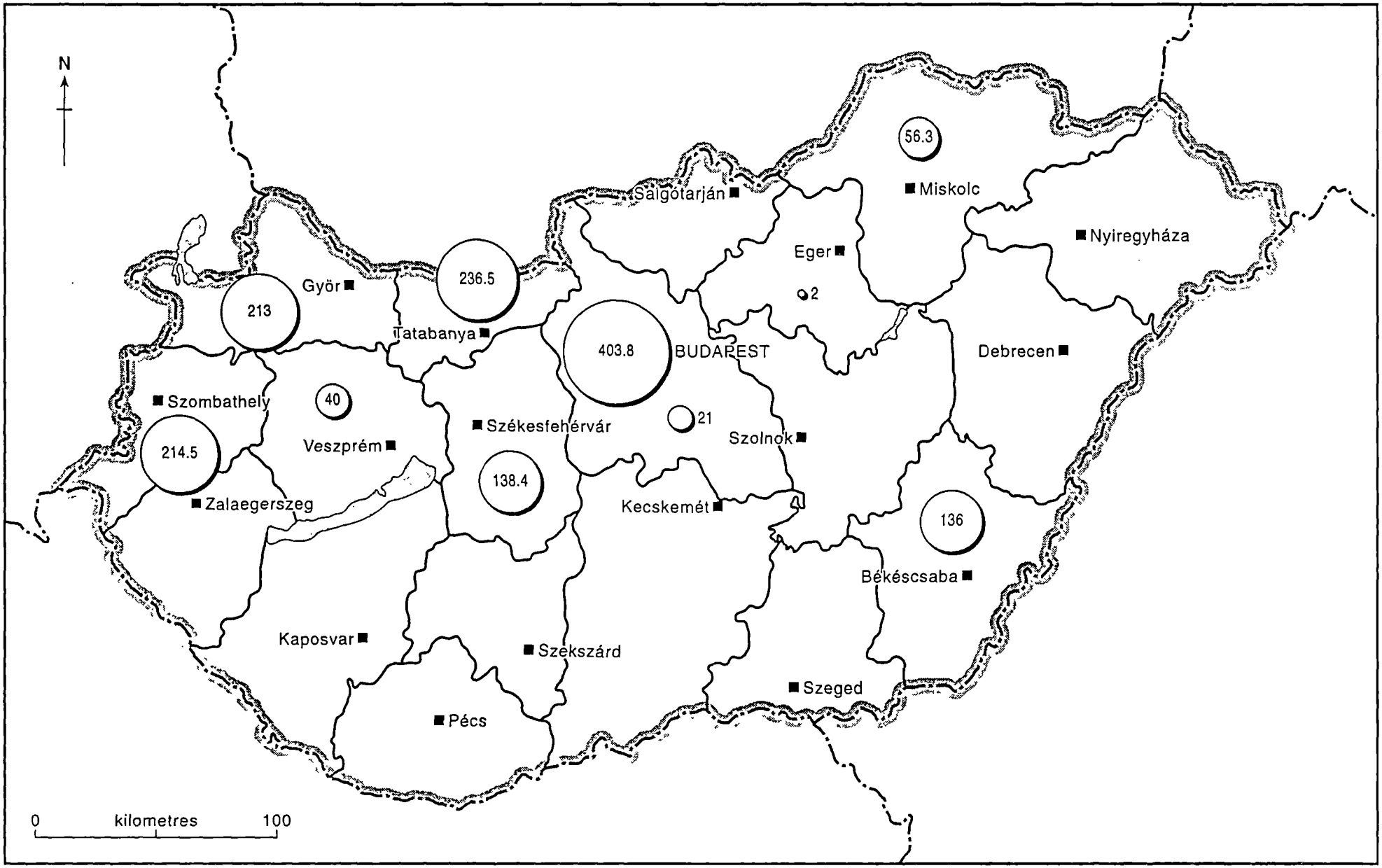
Source: after *Automobil-Produktion* 1993, 48, 68 and 104

Table 5.18 **Direct component suppliers to VW Mosel in east Germany, 1993**

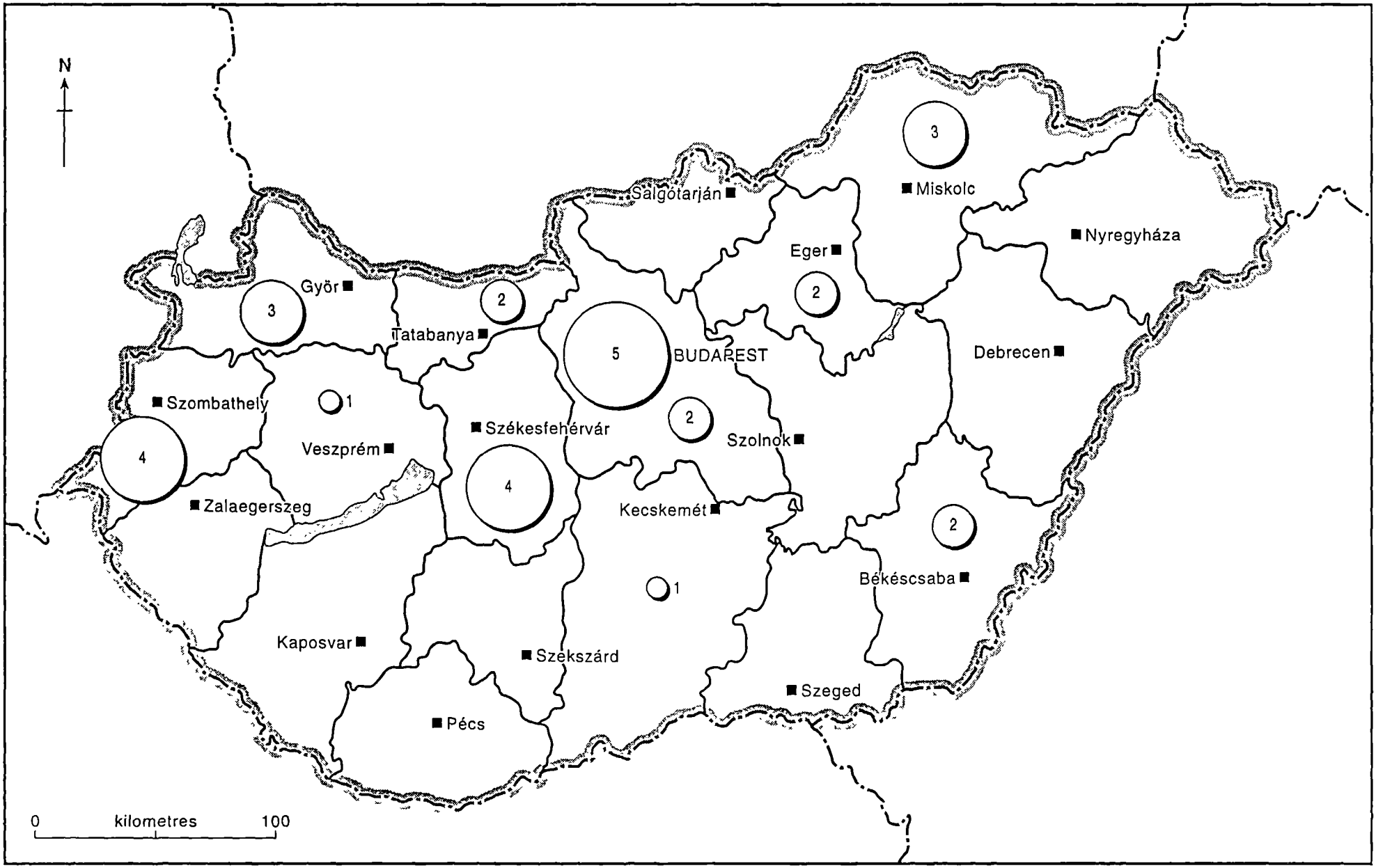
Supplier	part	location	kms from Mosel	JIT	employees
AKT	windscreen spray	Gardelegen-Altmark	320	3h	295
Autoliv	seatbelt	Döbeln	60	1h	55
Automobiltechnik	stopper	Heiligenstadt	265		150
Bahrataler	window part	Bahratal	130		61
FWG F	mechanical treatment	Glauchau	5		110
FER-Bosch	horns etc.	Eisenach	200		580
FWG	transmission	Glauchau	4	15m	120
Geräte- und Pumpenbau	water pump	Merbelsrod	200	4h	200
Hohe Schleiz	various	Schleiz	90		321
Maschinenbau Haldensleben	driveshaft parts	Haldensleben	300		230
Möve Brems	brakes/clutches	Mühlhausen	170		60
Karosseriewerk	welded parts	Dresden	160		395
Kunstofftechnik	various parts	Ottendorf	120		210
Sächsische Schraubenwerke	metal parts	Chemnitz	30	1h	140
Siemens	electrical parts	Zwickau	7		300
Alfred-Teves	brake parts	Reichenbach	20		150
Tröbitzer Landmaschinen	landmaschinen	Tröbitz	140		420
3 disabled peoples workshops	sub-assembly	Zwickau, Falkenstein, Glauchau			284
Total					3,710

Source: after *Automobil-Produktion* 1993, 104

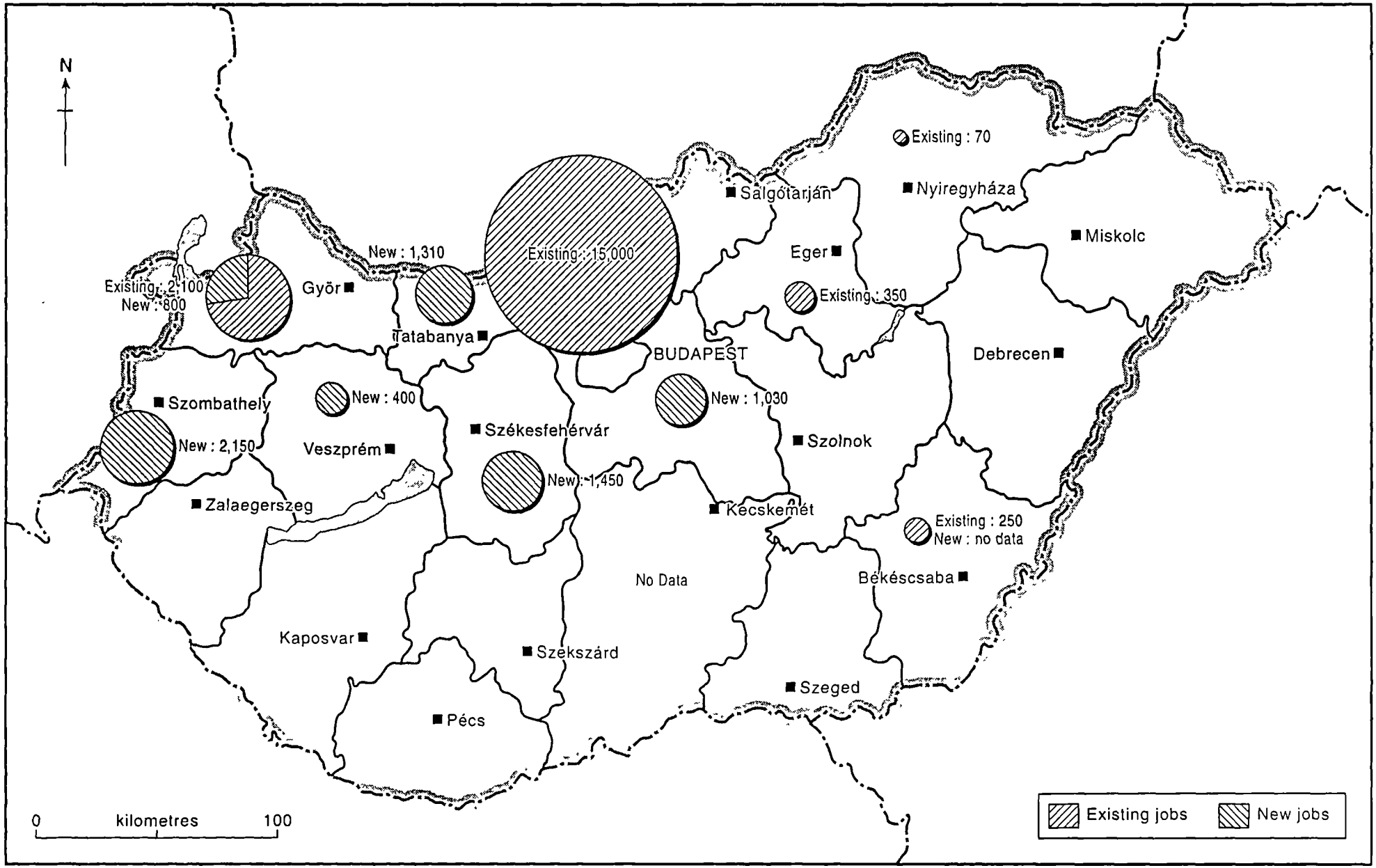
Map 5.1 Foreign automotive investment in Hungary by county, 1993 (USDm)



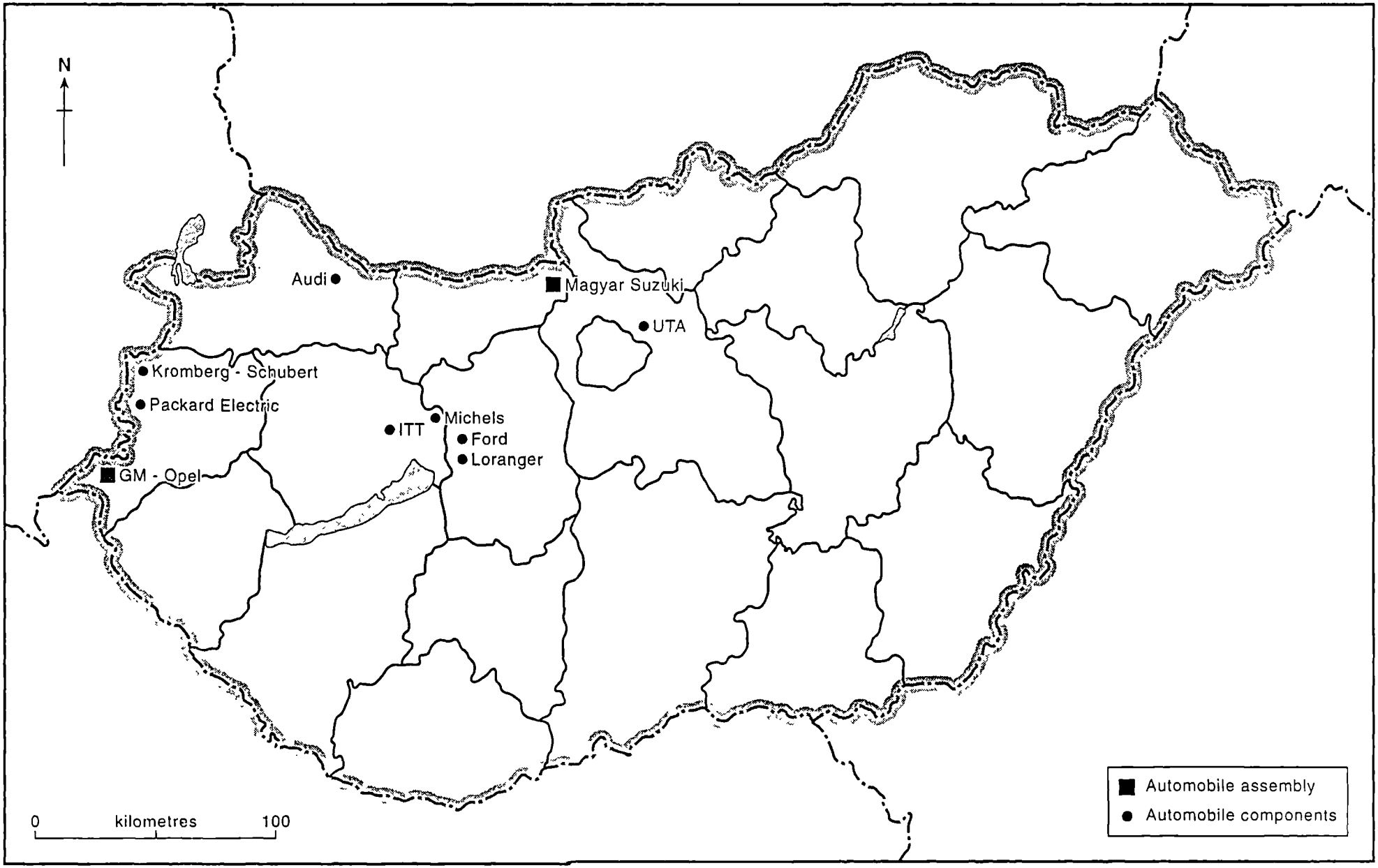
Map 5.2 Number of automotive investments in Hungary by county, 1993



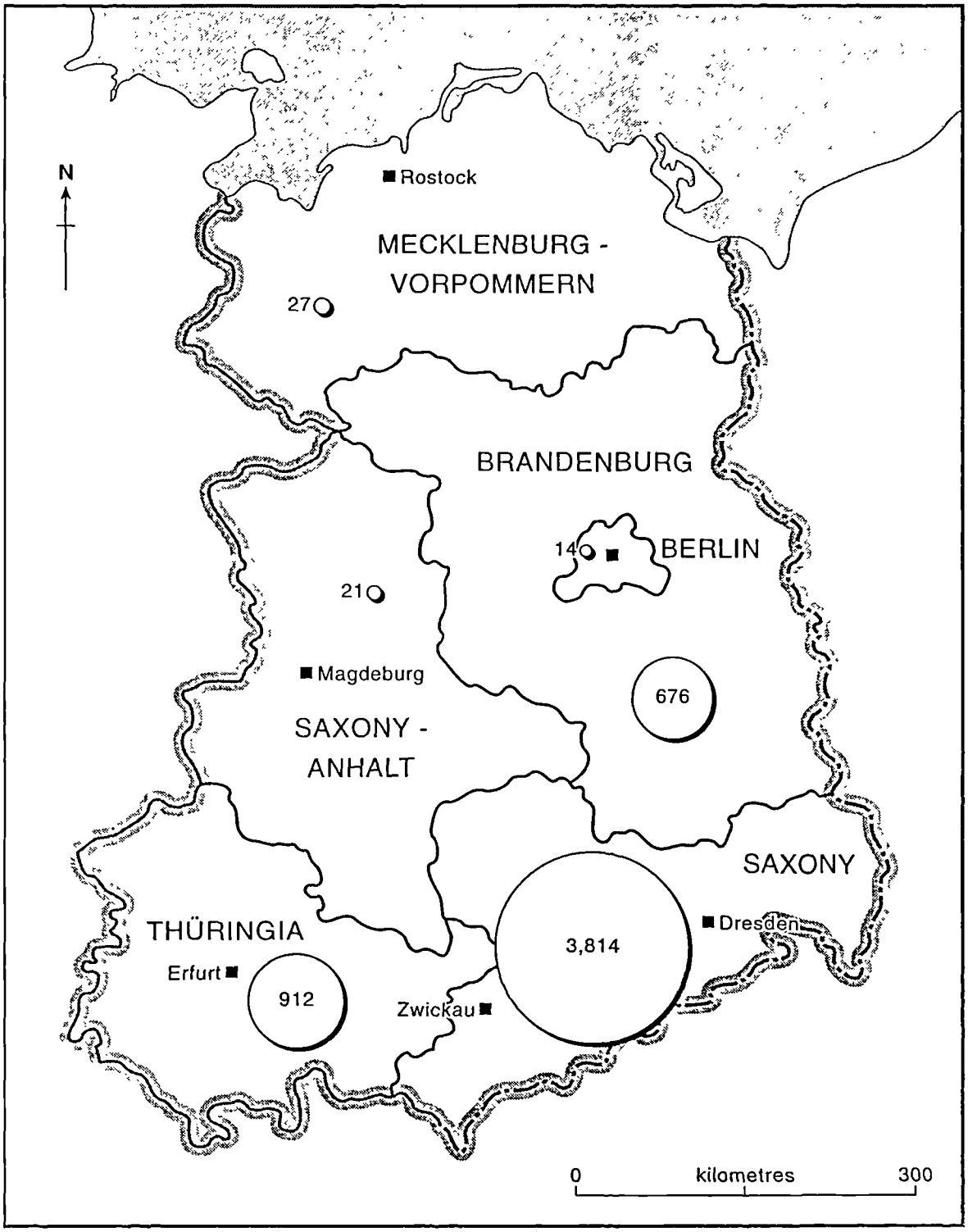
Map 5.3 Planned employment from foreign automotive investments in Hungary by county, 1993



Map 5.4 Greenfield automotive plants in Hungary, 1993

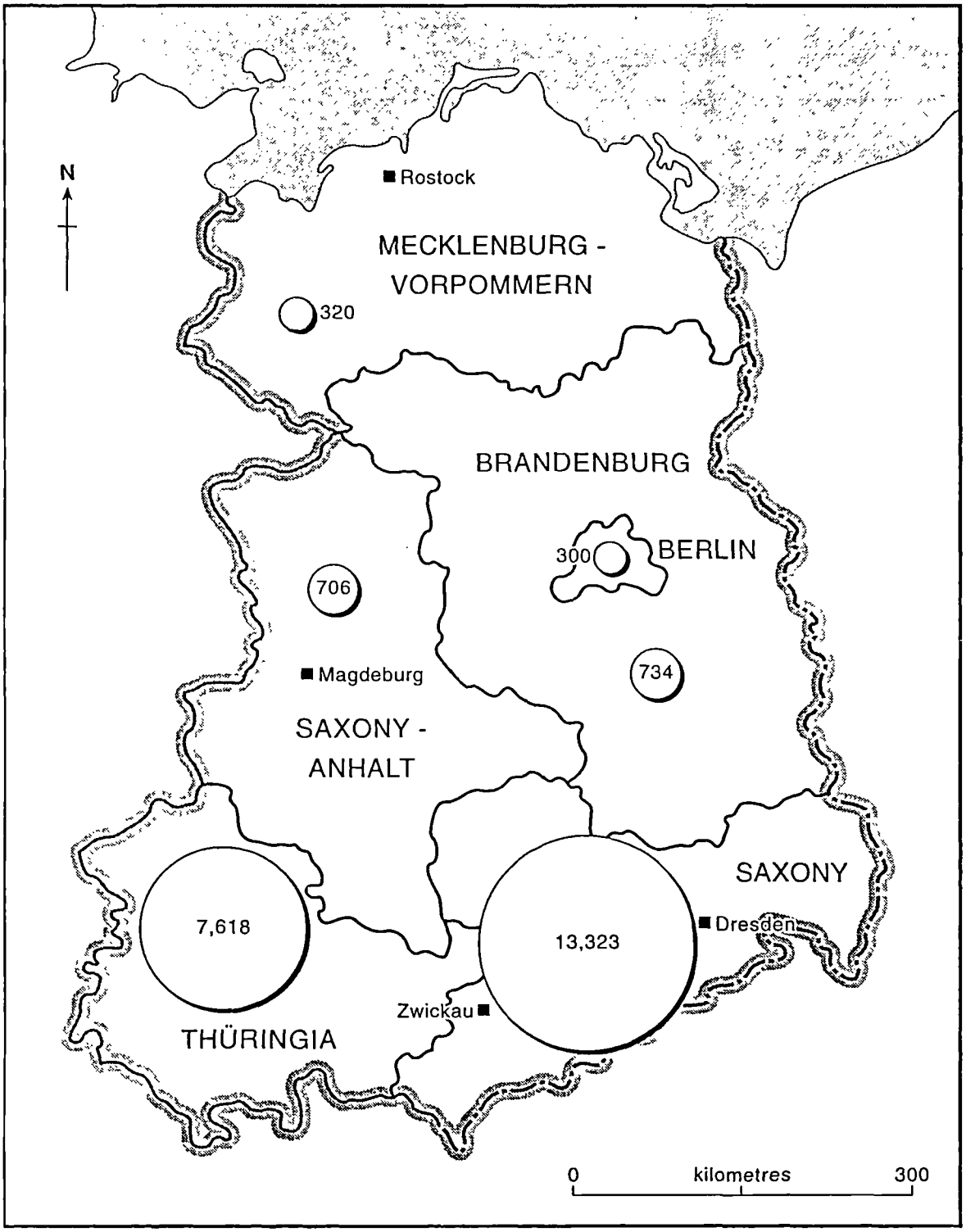


Map 5.5 Planned foreign automotive investment in east Germany by Länder, 1993 (USDm)



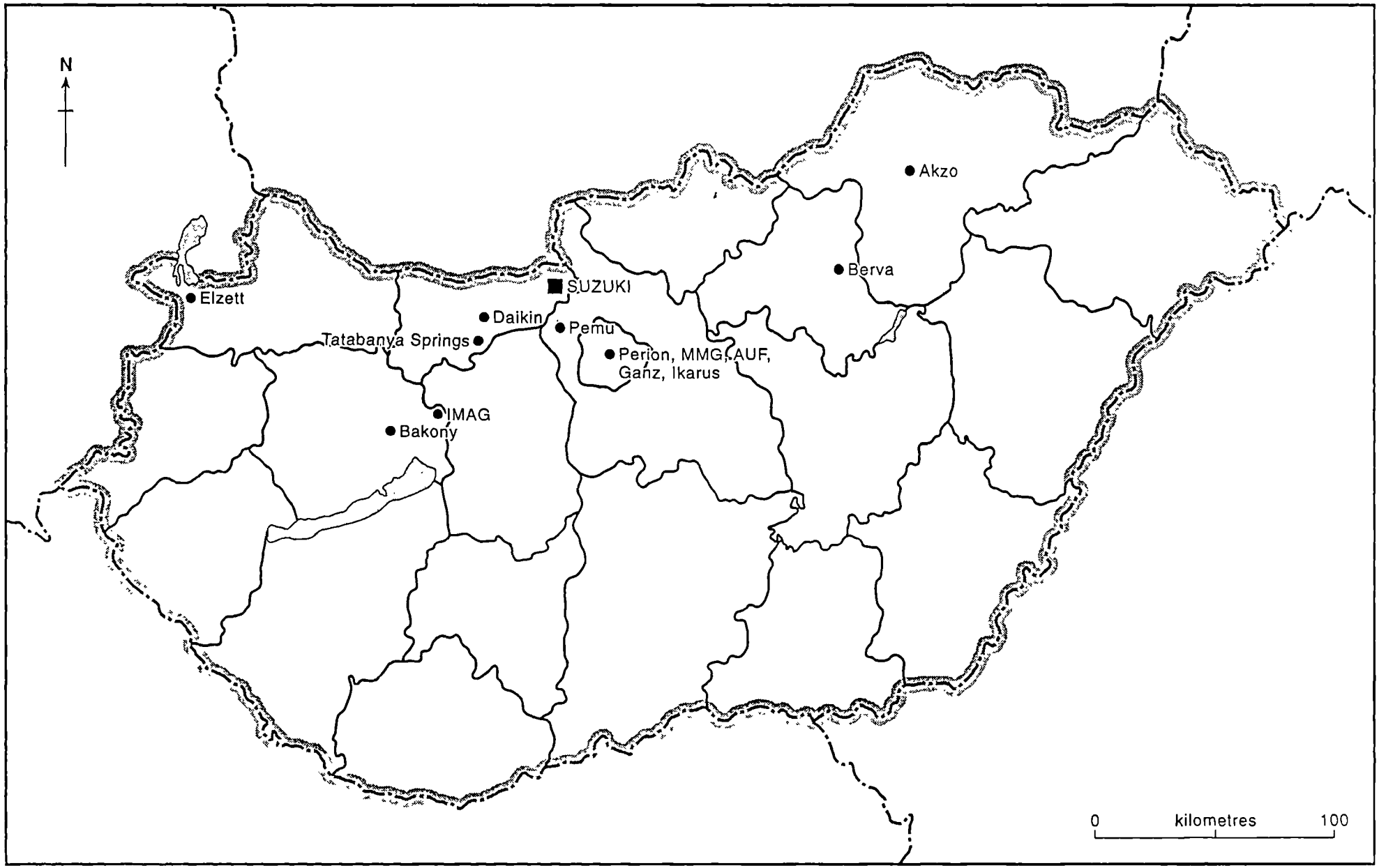
Source : after Automobil - Produktion 1992, 55 - 6, and author's calculations

Map 5.6 Planned employment from foreign automotive investments in east Germany

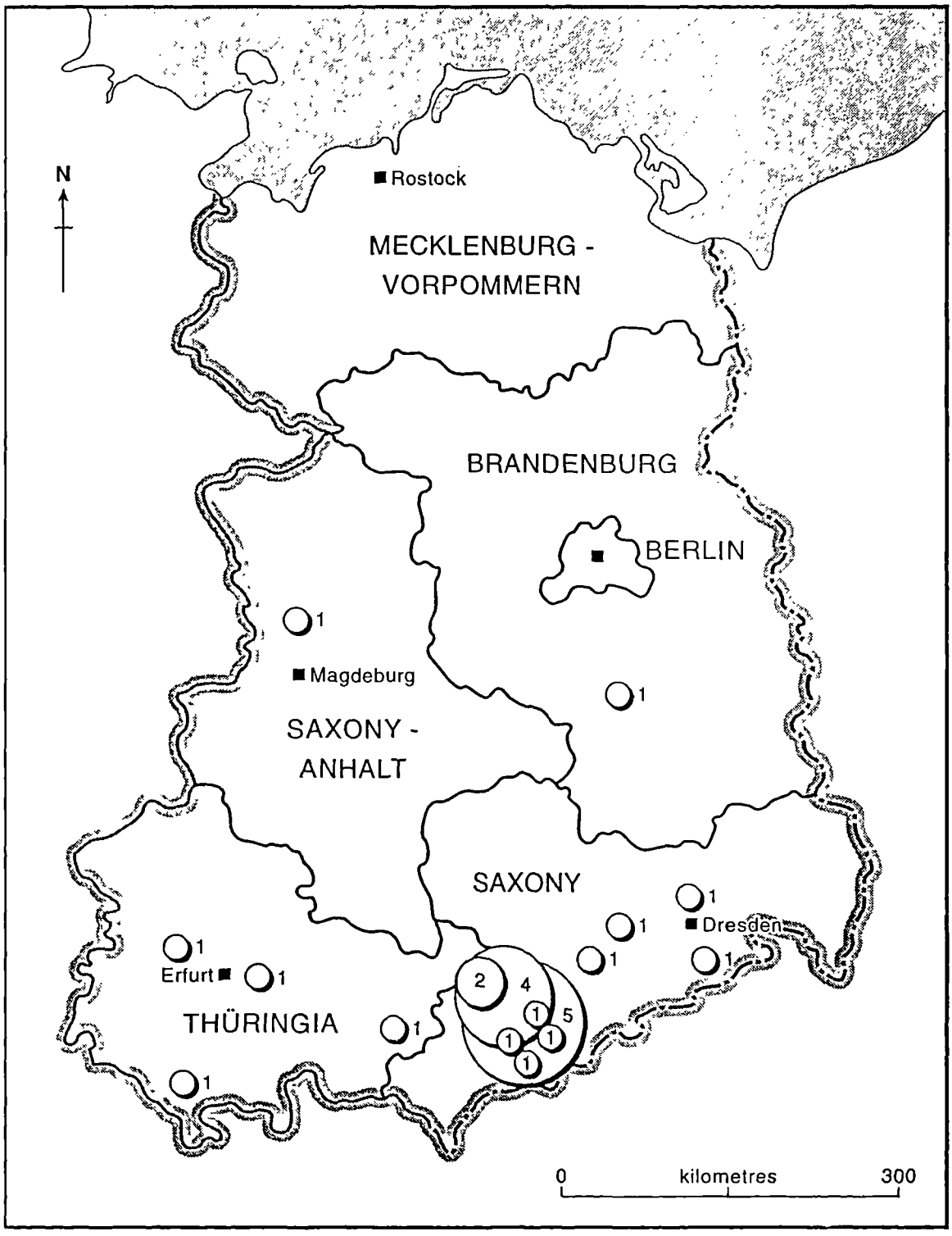


Source : after Automobil - Produktion 1992, 55 - 6, and author's calculations

Map 5.7 Magyar Suzuki's major suppliers in Hungary, mid 1993

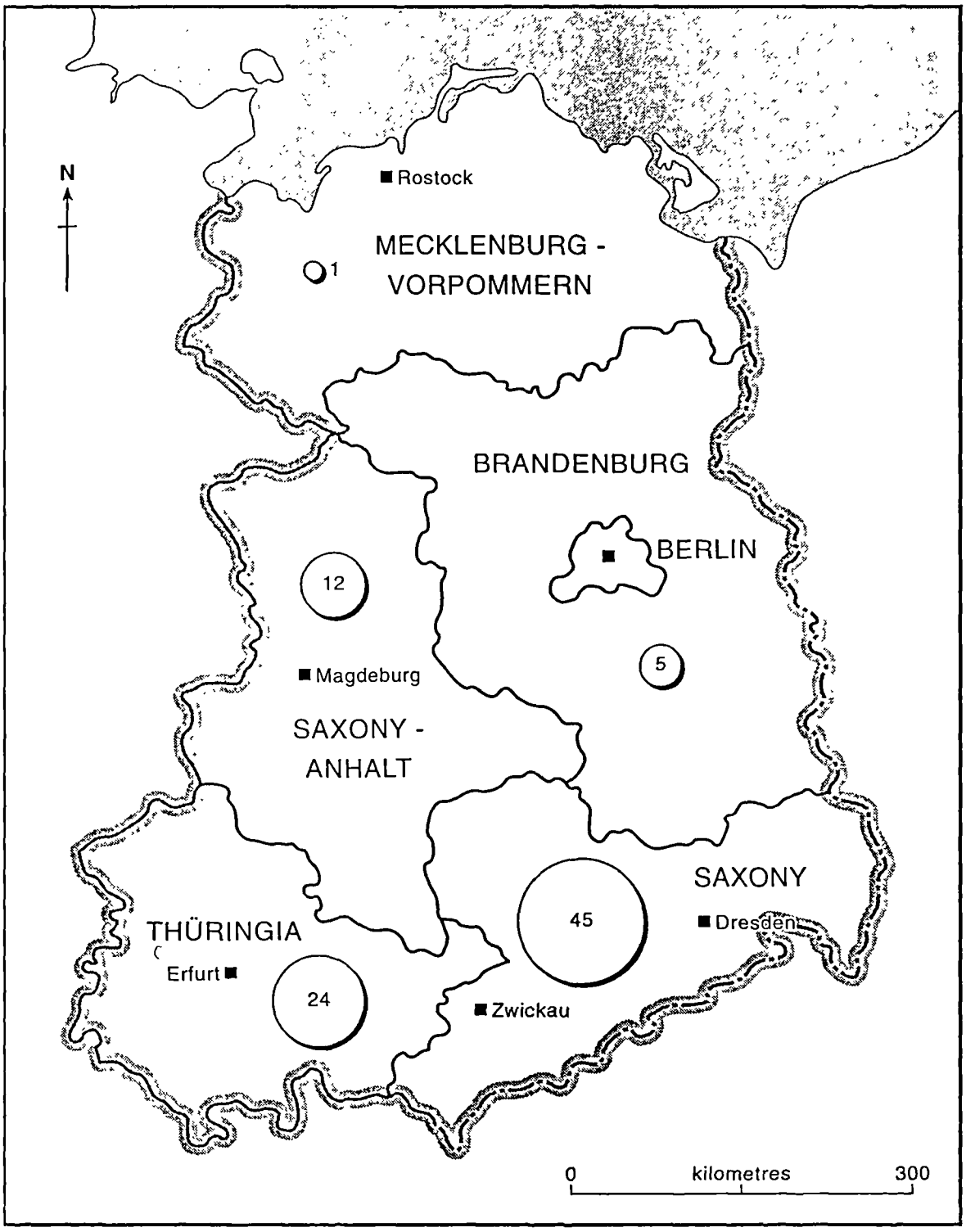


Map 5.8 VW Mosel's suppliers in east Germany, 1993



Source : after Automobile - Produktion 1993, 68, 104

Map 5.9 VW Group's suppliers in east Germany by Länder, 1993



Source : Automobile - Produktion 1993, 67

Figure 5.1 **Organisational structure of IKARUS, 1993**

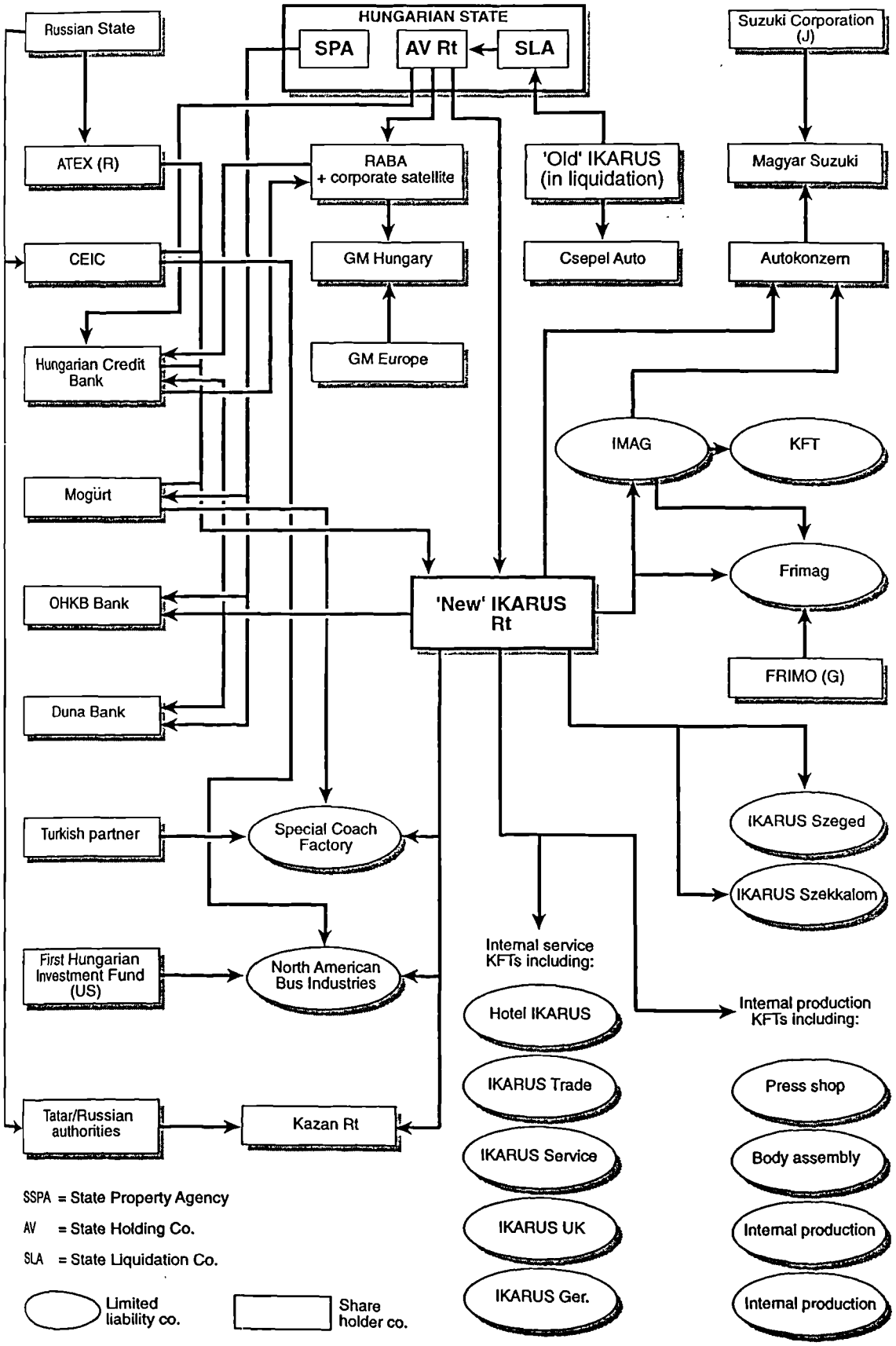
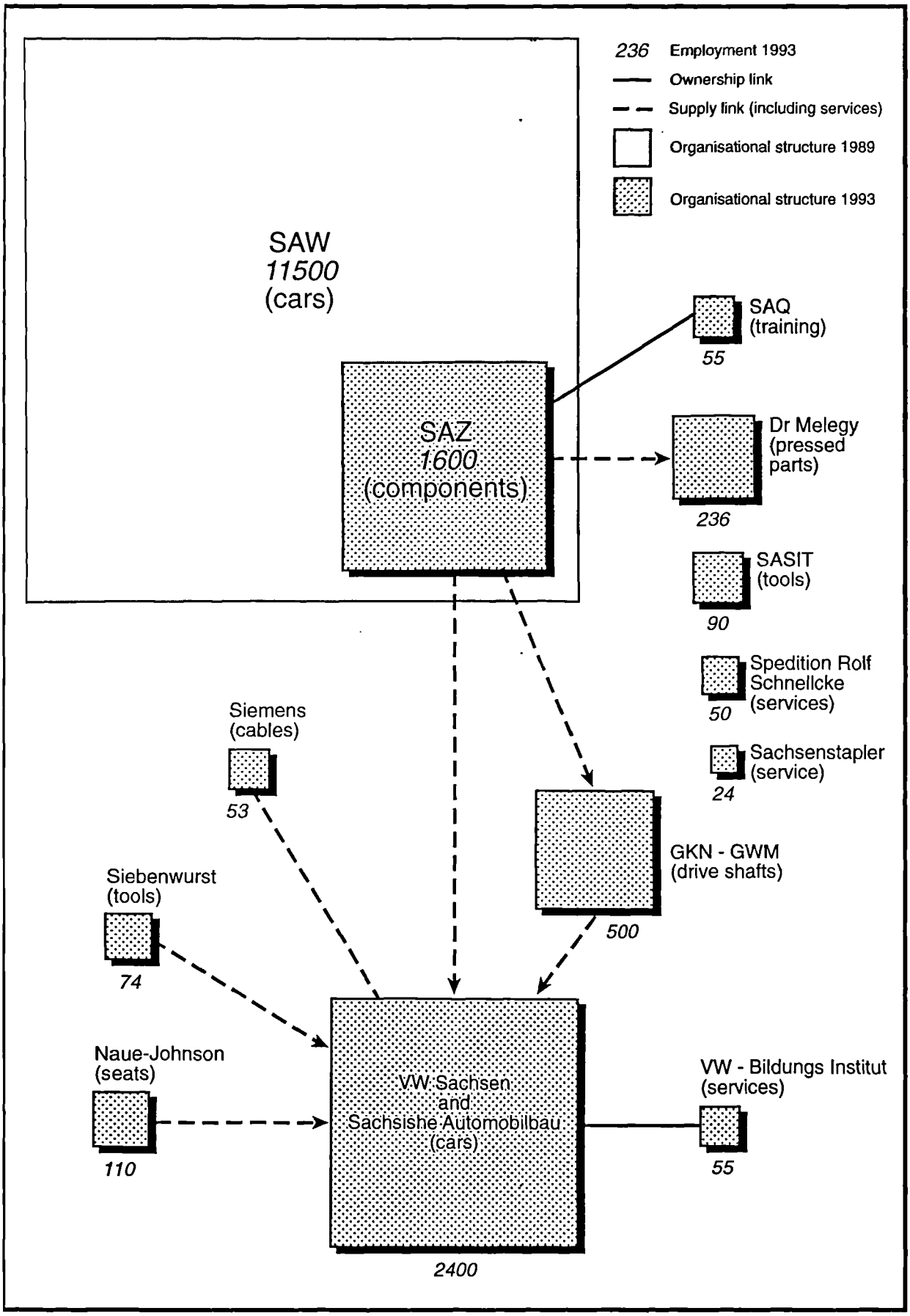


Figure 5.2 Simplified organisational restructuring of Sachsenring Automobilwerke, 1989-1993



Chapter 6 The transformation of work: workplace change and employee reactions in the automotive industry in Hungary and east Germany

6.1 Introduction

In this chapter we examine the transformation of work in automotive plants in Hungary and east Germany: the transformation of labour power into profitable labour power. This involved the marketisation of wage relations and the *habituation* of labour to new circumstances. To examine these changes in concrete empirical terms this chapter is divided into three major parts. The first part of the chapter examines the transformation (or otherwise) of work in the Hungarian and east German automotive industries in general. The second section expands upon the case studies introduced in chapter five, and focuses on the nature of work in foreign owned assembly and component plants. These plants have been at the forefront of changes and have formed a 'best practice' which local producers have been encouraged to mimic in the course of the 'Westernisation' of the economy. The final section also follows up the case studies by examining the transformation of work, or rather the lack of it, in two large indigenous automotive firms. Each case study addresses both management attempts to introduce new regimes or work and worker strategies of resistance (and co-operation). In doing so the transformation of labour relations systems at the enterprise level are considered along with the role of the two main unions in the auto industry, VASAS in Hungary and IG Metall in eastern Germany, as they attempted to introduce a new basis of trade unionism on the shop floor.

6.2 The transformation of work: working conditions in the Hungarian and east German automotive industries.

The labour process and working conditions in the automotive industry in Hungary and east Germany differed little from the general situation in ECE (see Braverman 1974, Burawoy 1985, 1988, 1992, Clarke *et al.*, 1993, Filtzer 1986, 1992, Haraszti 1977, Mandel 1992, and Stark 1988, 1992c). However, there were a few significant specific factors. Work in Hungarian automotive enterprises was affected by their integration into the CMEA international vehicle programme and the introduction of the New Economic Mechanism (NEM) as both demanded increased intensity of work. The links with the CMEA programme permitted access to western technology which improved work but the uneven development of technology created imbalances in production and variable standards of ergonomics. The NEM led to reforms in the mid-1980s which established enterprise councils in large state-owned enterprises in order to introduce a system of self-management into industry. The councils could in theory block nearly all decisions for although the enterprise director had no constraints on his prerogative he was always mindful of the council's ability to dismiss him. In practice the councils rarely used their powers not least because the personnel elected by workers tended to be trade union representatives who acted as mouth pieces for management rather than defenders of worker interests. There were however opportunities for the trade union to take up *individual* worker's cases where evidence of injustice existed. Thus the decentralisation of the Hungarian economy placed it apart from other CMEA countries and resulted in individualism and the absence of collective solidarity amongst workers.

In contrast to Hungary the auto industry in the GDR was organised according to the classical soviet model right up until 1989. Control remained highly centralised and the industry was plagued with the problems associated with planning which forced the generation of informal networks to compensate for planning weaknesses. The poor co-ordination of the industry resulted in a high intensity of work, because of production irregularities, and poor working conditions (dirty, dark production halls and inadequate tools and parts). Despite the high effort demanded of workers, output and remuneration were poor. Workers were organised and disciplined not only by supervisors but also by union shop stewards who were very close to the SED. The union would deal with individual complaints concerning the behaviour of particular supervisors but only within the confines of the official ideology. It did not therefore defend the interests of workers but acted in conjunction with management to enforce discipline, in part through a system of patronage conferring privileges ranging from career advancement to holidays. However, in contrast to Hungary workers in the industry had a strong sense of collective consciousness. For many who worked in the industry before and after the *Wende*, work, albeit more intense after the changes, was more enjoyable owing to better conditions. This view indicates that the transformation of work in the industry was complex and accompanied not only by new material circumstances but also new attitudes; it is to these changes that we now turn.

Hungary

The first, and most important influence on the transformation of work was the decrease in employment following the loss of markets and its effect on the politics of

the workplace. In the first phase of job losses so-called 'unproductive workers', party and trade union officials who acted as ideological mouth pieces for the Communist Party, were forced out. At the same time enterprises continued to feel responsible for their workers and sought to avoid compulsory redundancies beyond that group. New retirement rules allowed enterprises to force pensioner and older workers to retire on state benefits. Also, some workers left voluntarily (and were not replaced) to take advantage of the new opportunities offered by the labour market.

The second and larger phase of job losses took place once the statutory framework began to change. Where enterprise councils existed, prior to 1990 the enterprise management had to win the consent of the council before any redundancy programme could be implemented. With the disbanding of the councils, management was free to manage without interference from worker representatives and unilaterally pushed through redundancies. In most cases some form of social criteria for selecting workers to be made redundant and the level of compensation was agreed with employees. In practice, however, management (supervisors or shop managers) used the redundancies to refashion skill profiles and rid themselves of 'poor performers'. Resistance to redundancies by workers was muted.

The threat of redundancy undermined the sense of collective solidarity, as workers were forced to compete with each other and pursue individual strategies. In addition, the absence of credible institutions representing workers interests[1], and the

[1] Workers continued to distrust official trade unions owing to the legacy of the past and the slowness with which union structures within the shop floor began to take on the role of defending workers rather than acting as a conduit to management attempts to reduce employment levels.

general acceptance that marketisation demanded job losses both helped to explain the absence of resistance to redundancies. Instead the threat of redundancy increased discipline as the level of absenteeism and labour turnover declined. In part this reflected the new social make up of workforces in which youngsters and pensioners had been forced out, leaving workers with family responsibilities. This created workforces which were more dependent and thus less resistant to change. Thus in the context of job losses, in which workers had little choice but to acquiesce, management possessed a new weapon which could be used to threaten and discipline employees and create the conditions necessary for management to reorganise and take control of the labour process.

However, whilst the threat of redundancy assisted the introduction of new attitudes towards work, declining volumes of production undermined attempts to pursue new ways of working. Indeed in many respects the market environment actually accentuated the anarchy of the labour process. In the first instance the termination of production - sometimes for as long as six months - or at least the reduction in the number of shifts worked, meant that workers had more time and an incentive to concentrate on developing a second income. As a result workers became less dependent on their employers and discipline declined as absenteeism increased. Production crises continued and supervisors were forced to improvise in ever more sophisticated ways to prevent liquidation. Labour was shifted not only between machines but also between shops. Mechanised assembly lines lay idle since volumes were too small to make their utilisation worthwhile. Instead workers in very small groups, perhaps only two or three, assembled components (such as speedometers)

largely by hand. Unit costs increased and the extremely low capacity utilisation meant that effective use of labour was difficult to achieve. There were many opportunities for workers to conceal effort. At the same time supplies were disrupted as suppliers were liquidated or withdrew from segments of the market, and often new suppliers took time to match the quality supplied previously. Overall the market resulted in the slow down of production, an increase in the proportion of work-in-progress and a labour process at first more anarchic than before.

In response to falling demand, falling employment and the problems identified above management sought to re-concentrate production. In one of the legacies of the extensive mode of development many automotive component firms had established 'branch plants' in the 1970s to tap into new reserves of rural female labour to assemble components manufactured in main towns where labour shortages meant wages were relatively high. Once demand declined enterprises closed or sold peripheral plants and shifted production to core plants in the towns. Despite previously lacking political awareness, the absence of alternative employment opportunities in rural areas stimulated campaigns by workers to keep branch plants open, even including offers to purchase production facilities. To enable this the government had set up a scheme to assist employee buyouts but since the purchase price went to the government rather than the enterprise, management tried to prevent workers from using the procedure. The closure of branch plants disproportionately affected unskilled and female assembly workers. Correspondingly it increased management dependency on a core group of skilled male workers in the main factories who had played such an important role under the old system.

Assembly functions were added to the main plants in urban areas where higher skilled (generally male) workers had to be persuaded to take over tasks which were previously categorised as unskilled and done by women. General reluctance to do so forced management to tap into local reserves of female labour which had developed in urban areas as a result of the economic changes. Within the core plants production was also shifted as enterprises tried to cut overheads and reorganise production layout to increase efficiency and regain control over how work was conducted. Production was concentrated into main halls cramping workers to give them less chance to 'waste' time by walking around the site or between different machines, and thus making it harder for them to conceal effort from supervisors. At the same time some enterprises shifted certain management functions to the shop floor to break down the gulf between management and workers. A by-product of such a strategy was to increase the level of management surveillance. In one enterprise management even introduced a closed circuit TV camera in order to keep a watchful eye on its workers.

The third influence on the transformation of work was the reorganisation of production to concentrate on core functions, regularise work, increase flexibility and raise throughput. Peripheral jobs were terminated and components sourced externally; this too enhanced the position of core workers whereas auxiliary workers were dispensed with. To regularise the flow of work inventories were established between different elements of the production process in order to minimise balance-delay difficulties and to ensure that when production disruptions occurred, work elsewhere in the process continued. This contributed to the disintegration of production

processes in order to increase flexibility. These simple changes forced workers to work more of the time and also work under pressure since they always had a backlog of tasks to be done. Production layout was also altered in order to improve the ergonomics of work and to allow concentration of production in smaller halls to enable more to be done by one worker. Thus whereas one machine might have had one operator and an auxiliary in the past, reorganising the layout allowed one worker to operate two or even three machines simultaneously. However, the move away from an integrated production system sometimes made it harder to ensure that targets were met. To overcome this problem some managements replaced time-rates with piece-rates. The absence of capital prevented significant investment in new technology which might have altered the labour process. Where investment was required to meet orders from western customers, customers paid for the new machines themselves and located them in the supplier's factory. In this way more and more workers operated machines which did not belong to their employer.

In addition to establishing more logical and efficient production layouts, management sought to control the labour process in other ways. Having already reduced the proportion of non-productive to productive workers and the number of un- and semi-skilled employees, management set about reorganising labour. Jobs were enlarged, and arguably enriched, to include not only machine operating but also basic maintenance and auxiliary functions. Production norms were also rewritten. This was not a simple process of management increasing norms, although this did occur in some cases, but more often a genuine attempt to reinforce the significance of norms by making them more realistic and specific to particular production processes.

In particular, firms which found new western customers were forced to establish detailed measures of the efficiency of processes and time costs which resulted in the production of information which could be compared with the west and which armed management with a weapon in attempts to raise quantity norms by increasing the speed of processes. At the same time enterprise management introduced new devices to enable them to control labour time. Managers forced workers to complete time-sheets and account for their use of time. Discipline was also increased as smoking on the shop floor was banned and breaktimes enforced much more rigorously than before.

The newly defined jobs were allocated to skilled workers, whose only alternative was unemployment, whereas before the tasks had mostly been assigned to semiskilled workers. Skilled workers were retained often under the pretext that they would be able to operate new high technology machinery to be introduced in the future. On the face of it such a strategy seemed to reinforce the dependence that management had in the past on a core group of workers; however the changes were often accompanied by efforts to undermine the privileges that group of workers previously enjoyed. Thus skilled workers were forced to become operators and do menial tasks like other workers. However, in some cases core workers were able to retain privileges, particularly in firms where management continued to feel responsible for *their* workers. One outcome involved core workers and management purchasing firms from the state through an ESOP (employee stock ownership plan). ESOPs allowed firms which had not found foreign investors to remain in business and offered management the prospect that employee ownership would encourage workers

to take more responsibility for their work and show more willingness to use their initiative. However, early ESOPs, for example at Perion Battery Factory in Budapest, tended to show that employee ownership did not have a significant effect on workers, not least because it seemed too similar to the *de jure* situation under the Communist Party. Whereas the majority of firms retained core skilled workers, there was a counter trend as some enterprises sought to eliminate at least some skilled workers and become more reliant on semiskilled workers.

In the majority of enterprises the issue of quality control provided the pretext for management to gain control over the labour process. Improving quality was seen as the route to win market share in west European markets. As a result enterprises were very keen to employ management consultants (mostly funded by western aid) to assess their procedures. In doing so management undermined the power of the core workers on which it was increasingly dependent by using western 'experts' to discredit their knowledge and power in the enterprise. New managements were persuaded of the need to introduce quality control and assurance systems, and the ISO 9000 series in particular. Whilst the implementation of ISO 9000 often included some technical change, more pertinently and significantly, it enforced a system of bureaucratic regulation and control over *how* work was to be done. The most important aspect of the system cited by management was the identification of work with particular workers. This allowed worker effort to be measured and compared and the tracing of defects to individuals who could be disciplined through fines and ultimately dismissal. In order to convey the significance of such changes to workers, managements admitted to having dismissed people as a deterrent to other workers.

Implementing quality assurance systems did not simply refer to technical or bureaucratic change but also to attitudes. Management used ISO 9000 as a pretext to 'reorientate' workers to the new market environment. 'Special education programmes' rarely concentrated on technical issues but used seminars to focus instead on economic, financial and management issues to try to align workers' interests with those of management. The seminars were used not only to encourage workers to be more responsible for the quality of their work but also to convey the new roles that management and workers had to play under the new circumstances. At the same time supervisors were made responsible for achieving pre-agreed quality targets and assigned the responsiblity to ensure that workers met their targets. Thus implementing quality control was used to make supervisors assume greater responsibility for the way work was carried out by workers.

The introduction of quality control were often linked to new systems of remuneration. We have already seen that where production processes were altered, pay systems were changed from time-rate to piece-rate and vice versa but other general changes also took place. For those who remained in employment pay rates increased but since inflation was high real wages declined. In order to reward some workers for taking on greater responsibility pay differentials were increased considerably. Pay was also increased for supervisors - in the past they were often paid less than ordinary workers - which with their new responsibilities aligned them more and more with management. For the first time management had a significant presence on the shop floor. In addition performance-related pay and bonus payment systems

were used to encourage workers to meet quality as well as quantity targets. Some enterprises chose to measure group performance with the result that workers had an incentive to enforce discipline on their colleagues to ensure that the maximum bonus was secured. In these cases it gave supervisors considerable leverage as they distributed this bonus amongst the workers.

Despite these changes, management continued to face difficulties in devolving responsibility and persuading workers to use their initiative and feel more responsible for their work. To overcome these problems firms which won contracts from foreign companies, and Magyar Suzuki in particular, began to introduce quite different forms of labour organisation. Many talked of wanting to follow the 'Japanese Way' by the introduction of Suzuki 'Five S's[2] and experimentation with forms of team work. It was significant that management's ability to exploit the individualism and competitive spirit bequeathed by the planning regime in Hungary, which was deepened by the fear of unemployment, had reached its limit. Instead management sought vehicles that broke-down narrow definitions of self-interest and encouraged co-operation. Overall workers were forced to compete with each other in the field of workers interests (jobs and pay) but when it came to the company's interest (work) mechanisms for making them co-operate and work together were implemented.

All these changes represented a dramatic reform in behaviour and in mental attitude. Implementation also implied a considerable cost in management time with the result that new work regimes were confined to certain parts of factories - often on

[2] Suzuki's 'Five S's' refer to the Japanese words for cleanliness, orderliness, the minimisation of superfluous effort, the minimisation of effort required, and optimisation.

lines producing products for export to western Europe. The result was the creation of 'islands' of new production - sometimes they formed internal limited companies (see Burawoy 1992, Stark 1993) - within which a new work regime, new labour process, and new remuneration scheme were introduced. Thus the transformation of work was extremely uneven within and between enterprises. Even within the same factory workers could be under very different management regimes with quite different labour processes. One negative feature of this was that workers in other parts of the factory reacted against those fellow workers who secured larger sums of money. This created a collective identity amongst the workers on the new lines and also demonstrated the effort and discipline demanded in factories organised according to western rules. For those working under new conditions the threat that they would be moved to another part of the factory and lose pay and privileges was a strong incentive to ensure compliance to the new work regimes. In these ways new cleavages developed and worker hierarchies established which helped to reinforce the changes management were trying to introduce.

As the labour process was transformed so too was the institutional structure of labour representation (see chapter 4). Under the former regime the main union represented in the automotive industry was VASAS which was a member of ZWOT, the association of unions. Whereas some new unions were established in the auto industry the traditional union VASAS continued to be the main union albeit now operating as a defender of worker interests rather than as an organ of management. On the shop floor the major change was the termination of enterprise councils and the election, as part of the Labour Code introduced in July 1992, of works councils.

However, in the immediate aftermath of political change there was a vacuum as the old trade unions had yet to transform themselves and new organisation had yet to be established. Thus at the time of most uncertainty labour representation was at its weakest.

The legacy of the 'labour movement' under the soviet regime undermined unions' attempts to recruit and mobilise workers. As a result unionisation in the industry fell considerably. One reason for this was that local union branches were slower to respond to their new role than was suggested by the pronouncements emanating from the union's head offices. For in the same way as management had to internalise a new role, so too did unions and their officials. With the dramatic reduction in employment levels local union officials were often confused about whether their interests lay with the workers being made redundant or with management arguing that redundancies were the only way to ensure the enterprise's viability. In practice worker representatives agreed to job losses but struggled with management over pay levels. However, their lack of success in winning pay increases further undermined workers' faith in the union's ability to defend their interests against management. For many workers and managers, local union officials continued to operate in the old way.

The new institutional framework was thus central in establishing the manner in which workers' interests were to be represented and their relationship to management interests. The new works councils, whose representatives were often VASAS shop stewards dating from before the political changes, became the object of struggle.

There was considerable debate between management and workers as to whether the new councils were meant to assist management, to defend workers' rights, or were just a complete irrelevance given that management had been given the right to manage without interference. This debate was resolved in different ways in different enterprises but the difficult economic situation meant that in practice workers' representatives had very little influence on management. Another outcome of the institutional changes was that management no longer had to deal with trade union officials but only the works council representatives who tended to reflect the sectional interests of their enterprise, or in other words management, rather than broader industrial or political issues. This was beginning to result in enterprise level labour representation which did not foster solidarity amongst workers in different enterprises (see chapter 4). What all this showed was the significance of *habitus*; the institutional machinery was necessary but not sufficient to ensure that worker interests were represented. Indeed the concealing of this important point was one of the ways workers were habituated into the new circumstances. Worker *de facto* control over work during the soviet era had been replaced by *de jure* representation which only served to reduce workers' power.

Eastern Germany

Many of the changes that occurred in the Hungarian automotive industry also occurred in eastern Germany only more so and with much more rapidity; the effective closure of the industry and its subsequent reopening concealed the extent to which change occurred. Thus whereas in Hungary there were a series of struggles over changes, in the former GDR (west) German capital was so dominant in the course of

unification and in the years that immediately followed in that many battles were not even fought. Indeed the manner in which change was heralded as inevitable and the speed with which it was introduced had a significant impact on the transformation of work. The most important influence on the transformation of work in east Germany was the THA. The first phase of transformation resulted in the termination of production. The THA removed existing management and replaced them with managers from the west or easterners who were middle managers without links to the SED or the STASI. The new managements, who owed their position entirely to the THA, were forced to implement the THA's policy. Most importantly the new managements were compelled to measure viability of production against a profitability criteria and to judge labour utilisation according to turnover per employee. This allowed the THA to force management to terminate inefficient production: this was most of the industry's output.

Very quickly the new managements dispatched employees who had acted as local officials of the SED and STASI. With the termination of production in many plants, the vast majority of the industry's 65,000 workers were placed on short term working contracts and were compelled to attend training schemes. At the same time those employees who worked in workshops which manufactured items (such as minor tools and components) which could be much more cheaply outsourced were made redundant. Where welfare functions, such as kindergartens, were attached to enterprises they were removed making it harder for women to continue working. More controversially the THA also instructed management to cut skilled research and development personnel. The THA's course of action meant that production virtually

ceased, the workforce externalised (in one way or another) but productivity had increased dramatically, albeit without fundamentally changing the labour or production processes. However, the second phase, the start-up, was to have a profound impact on the labour process.

The manner in which the industry was wound down was significant in establishing the context for its restart and management's ability to forge new work regimes. As the THA took over effective management of its firms through 'place men' the issue of redundancies was taken away from the firm and out of the competence of workers ability to resist; after all, management was only doing what it was being told. In this way antagonism was concealed. The strategy to put employees on short time working contracts before actually making them redundant diffused potential resistance. In this way the THA also undermined workers' solidarity by isolating them from their colleagues. The overall impact of these strategies was the dispersal of resistance. But moreover, once production resumed and workers were bought back into work, management were effectively starting afresh with an old, but grateful workforce under completely new conditions. Management was in a position where it did not have to bargain with workers but instead could dictate conditions.

The threat of unemployment, as in Hungary, acted as a very powerful weapon to compel workers to accept the new circumstances; a dependent workforce was a vulnerable and pliant one. As the enterprises found new customers to replace the ones they had lost, workers were gradually taken off short time working. In effect this allowed enterprises to create a new workforce almost from scratch benefiting from a

hybrid internal-external labour market either workers accepted what they were offered or they were sent home. Skilled workers were the first to be brought back to work and forced to become operators and thereby lose the status they had previously enjoyed. As the workforces were reassembled a competitive spirit was engendered as management set about choosing the best workers to become supervisors. In this way a completely new hierarchy amongst shopfloor workers was established. This was significant because a sense of collective solidarity amongst employees, engendered by the *Kombinat*, was much stronger and persisted longer than was the case in Hungary. Whereas in Hungary supervisory personnel remained the same and were re-educated in the light of economic change, in east Germany supervisors were mostly new to the position and were inducted in a management-dominated environment. The role of the supervisor was defined as one very much on the side of management, and to reinforce this they were made responsible for quality, productivity and in some cases costs. With a dominated group of supervisors, who owed their position and privileges to management, management had devolved power and manufactured the institutional basis for controlling production. It could then set about fashioning a new work regime and labour process.

Western managements expressed satisfaction that the factories they took over were efficiently organised but argued that they were poorly utilised. Management thus set about changing the nature of work and increase work intensity. Production processes were systematically undermanned, designed to force workers, operating under considerable pressure, to find ways of working more efficiently. In addition to cutting manning levels, jobs were enlarged to include more tasks and greater

responsibility, such as for quality and basic maintenance. Not only did the utilisation of labour differ from before but so too did the nature of work done. For many suppliers the only orders they could win were subcontracting contracts from large west German auto suppliers. In some cases these merely involved the subassembly of already prepared parts. There was a reduction in the complexity of work done with the result that highly skilled workers were doing menial assembly tasks. Worker resistance was minimal owing to the condition of the labour market and because as we have seen a new cohort of supervisors - who had largely internalised management interests - existed to enforce the new work regime by enforcing discipline and controlling production. At the same time efforts were made to improve the ergonomics of work often through basic alterations to the working environment - such as levelling floors or enhancing lighting - and to clean up the conditions in which workers had to operate. In this way although workers were having to work harder, for many work seemed easier and less hazardous than before.

In eastern Germany 'lean production' (see chapter 2) played the role fulfilled by 'quality' in Hungary, at the centre of the discourse amongst management on the modernisation of work. The significance of lean production in transforming the nature of work was two fold: it provided a convincing argument about the German economy that enticed workers, and it justified new forms of labour organisation. Thus first, management used lean production to communicate their view on the problems that faced German industry in general and the automotive industry (assemblers and suppliers) in particular and the way in which workers were involved in the story. Management told workers about Germany's lack of competitiveness in Europe and the

new Länders' uncompetitiveness within Germany. They told the workers too, about the problems German car assemblers faced and how they were compensating by forcing suppliers' prices down. However, since all costs in east Germany were the same, so the story went, as in the west except for labour, the only way to ensure the viability of suppliers in the new Länder was for workers to consent to minimising wage increases and greater work efficiency (read: intensity). In this way management successfully passed the burden for ensuring enterprise viability on to workers whose best interests, they were told, were served by allowing management to manage.

Second, 'lean production' justified two types of practical changes. The first was the 'hollowing out' of firms as vertical integration was drastically reduced. In addition to reducing costs, the threat of further outsourcing hung over workers and provided an incentive to work harder or risk losing their jobs. Second, lean production was used to legitimate the introduction of novel forms of labour organisation: team work, quality circles and continuous improvement schemes. The introduction of team working was the most significant development not least because of the implications that rested on the role of the team leader; was the leader to represent workers or act as the lowest rung of management? In effect the poor condition of the labour market and the way workers' perceived interests were marshalled in line with those of management, disguised the sensitivity of the issue. The introduction of team working was often accompanied by the disintegration of assembly processes and the organisation of workers into small physically closed cells. Within these cells workers, paid piece-rates, rotated between job stations and so could control the speed of work. Management had secured hegemonic control over the

shop floor which permitted the withdrawal of technology and the transfer of control over the speed of work to employees at the same time as ensuring that productivity increased. The similarities between this position and that described by Harazsti (1977) in Hungary during the soviet era are striking. Management had completely refashioned the nature of work and seemingly the labour process and in doing so had re-concealed the new/old exploitative relations by forcing workers to internalise the labour process.

Quite apart from the role of the THA - something that we will return to - what made the transformation of work very different from that which occurred in Hungary was the extension of west German labour laws to include the new Länder (see chapter four). BGLs were disbanded and works councils were elected according to the West German Labour Relations Act. At the same time IGM moved into the new Länder in order to replace the old union in the industry, IGMO, and set about recruiting and mobilising members (see chapter 4). On the face of it the new labour laws and the institutional framework they created would seem to have offered workers a high level of protection. However, despite the rule book, management, with the might of the THA behind it, was able to translate its hegemony over the shopfloor into control over the institutionalisation of labour interests.

In the first instance IGM recruited shop stewards in larger enterprises and made contact with workers in smaller businesses to assist workers form and operate works councils effectively. Despite training by IGM officials, workers were simply unaware of their entitlement to co-determination with the result that works councils

remained weak. A further problem for the new works councils was that they were continuously being reduced in size as enterprises were broken-up by the THA and waves of redundancies took place. Works councils were thus on the defensive and had very little power with which to bargain. It is particularly significant that east German union activists felt constrained by Germany's complex rules which specify when collective action is and is not legal. The new rules meant that in the case of redundancies management had to agree a social plan with the works council in order to ensure that the most vulnerable were not the ones made redundant and to assist those made redundant to find other employment or training opportunities. However, in practice works councils had very little influence over redundancies and in various plants managements were able, at least partly, to select workers according to their ability. Even where management was forced to retain workers with social responsibilities this resulted in a workforce which had little incentive to resist change and risk losing their jobs.

The works councils in some component suppliers were no more effective in preserving wage rates (see chapter 4). Of equal significance to the tariff rate (wage levels) itself was the manner of its application in the new Länder in relation to wage groups and evasion. Under the German collective bargaining system all workers are attached to one of ten wage groups according to their experience and skill level. Wages are lowest in wage group number one and highest in number ten. This means that the allocation of wage groups to workers (which is supposed to be done in conjunction with the works council) is significant. In east Germany it permitted the establishment of differentials between workers and concealed genuine comparative

wages between east and west. As works councils were barely functioning at many sites and in others were close to management, management was able to put workers in lower wage groups than would be the case for comparable workers in western Germany. This meant that although comparable workers in eastern and western Germany were on the same tariff scale (albeit with an agreed differential to take account of lower productivity in the east) the difference in the way the wage groups were implemented increased the difference between wages in the two halves of the country.

The withdrawal by employers from the tariff agreement in 1993 (see chapter 4) forged an atmosphere supportive to management strategies to evade paying the tariff. Some firms left Gesamtmetall and were no longer obliged to pay the tariff. Many other smaller auto component producers found ways of paying below the tariff rate. Where there was resistance some offered works councils deals whereby job security pledges were made in return for workers reneging on their tariff entitlements. Such deals also implied the exclusion of IGM influence from the work place and works councils became more of an adjunct to management than a defender of workers' rights. It was ironic that these deals also went some way in re-establishing the job security that workers had enjoyed under the Soviet regime.

6.3 The transformation of work: workplace implications of foreign automotive investment

At the same time as work was transformed in the state owned automotive industry, foreign automotive investment established new work regimes. Foreign auto

investors used the conditions conjured up by systemic transformation to experiment and introduce innovative production techniques. Innovation in the field of labour organisation was integral to these strategies. To examine changes in labour organisation we return to the four case studies introduced in chapter five.

6.3.1 Suzuki in Hungary and VW in eastern Germany

Magyar Suzuki

Like Japanese auto-related investments elsewhere in Europe Suzuki, sought to apply some elements of the distinctive labour organisation employed in Japan. This involved notably the enforcement of rigorous discipline and the organisation of production workers into teams. The success of establishing a very different factory regime and organising labour in a manner that was alien to Hungarian workers depended on a rigorous and sophisticated recruitment and training programme.

When Suzuki first announced its intention to construct a plant in Esztergom there was a shortage of labour in the local area. The local labour market was dominated by four large state-owned firms which manufactured specialist products and employed skilled workers. One of the firms, SZIM, the well known machine tool supplier, had established one of Hungary's few training centres for mechanical engineers. The local labour market was skilled. Despite the labour shortage in the town it lay close to the contracting Dorog coal field which had one of the highest rates of unemployment in Hungary. By the time Suzuki began recruitment, the local labour market had been transformed as the four major local employers had closed and unemployment had risen above the county and national average. The area became

regarded as an unemployment black spot. This permitted Suzuki to be highly selective in its recruitment and establish a monopolistic position in a very depressed local labour market which undermined the bargaining power of workers and would-be employees.

Initially, Suzuki established strict criteria for selecting workers. Only those applicants who were male, between the ages of 20 and 22, were in good health, lived within a 10km radius of the plant (this included Dorog), had attended professional high-school but did not have a trade or profession, had some competence in spoken English, and had completed their national service were considered for employment. Despite these conditions there were two applicants for every vacancy when recruitment began. Applications were also examined closely to ensure that the 'right' sort of people were employed. Early recruits had either worked, albeit briefly, in one of the major four industrial enterprises or in one of the Dorog mines, and had subsequently been made redundant.

Of equal significance to the selection of workers was their training. Since Suzuki preferred to train workers on-the-job, the training was initially haphazard and largely comprised working in the company's factories in Japan. However, the new employees had either been poorly selected or poorly prepared, for many Hungarian workers, used to a less intense regime of work, found the experience of work in a Japanese factory very challenging. It also indicated to local management that if Hungarian workers were to become accustomed to the Japanese way of work, more rigorous ways of preparing workers would have to be devised.

> "Hungarian trainees sent to Japan went on strike and 10 per cent of them returned home early, some sacked for smoking on the factory floor, refusing to wear safety equipment and, in one case, working on every other car... Besides a diet of rice and fish - innards and all - that both sickened and starved the Hungarian meat eaters, compulsory overtime and the unremitting pace of work were grievances. What made the unpleasant unbearable, said returnees, was mean pay that was only average by Hungarian standards. Hungarian workers expect more of foreign companies". (*Financial Times*, 13 March 1992,14)

It thus became apparent that it would take some time to educate Hungarian workers to accept the hard work and longer hours of Suzuki's working methods. The nature of the working regime soon spread amongst local people and the company found it difficult to attract labour, despite the depressed labour market and its monopolistic position within it. Indeed it became a question of whether recruits would work for Suzuki rather than the other way round. At the end of interviewing a candidate the interviewer, having outlined the working system, would ask whether the candidate could put up with it. Fifty per cent said no.

As workers were also leaving on account of low morale and the difficulty of coming to terms with the new way of work, Suzuki's labour shortage was a serious concern. As a result it relaxed some of the selection criteria. It offered to consider applicants up to the age of 30 (later this was relaxed even further to include workers up to the age of 32), who lived within a radius of 20km from the plant and had completed a minimum of 8 years education. Significantly they became more willing to consider skilled workers, with a trade or profession, but only if they could demonstrate they were willing and could work to the Suzuki method. At the same time they designed a more effective training schedule which was designed to prepare

recruits better for the rigours of working for Suzuki. This involved informing potential recruits of the 'Suzuki Standard'. To ensure a steady flow of potential employees into the factory Suzuki established a formal link with local labour offices in Ezstergom and Tatabanya. In time it subcontracted the training programme to these offices. It was not unrelated that the more unemployed people Suzuki employed the more money it received from the Labour Ministry as a wage subsidy.

When workers were made unemployed, before they were eligible to receive any state benefit they had to register at the local labour office. As a result the office had a good knowledge of what sorts of people were available in the local area. In this way the office identified potential recruits for Suzuki and in effect supplied and screened potential labour. However, it proved difficult for the labour office to find people willing to consider working for Suzuki that the company would accept; the young were reluctant to apply and whilst older workers were, Suzuki was unwilling to consider them. However, once 50 potential recruits had been identified the labour office and Suzuki ran a three month long training course with the guarantee that those who finished would be offered employment at the plant[3]. Suzuki designed the course and had total control over what the labour office officials taught. The first five weeks of the courses were spent in the labour office. In the first week applicants were taught the 'Suzuki Standard': a payments system, a working hours/shift system and a commitment to life-time employment. Underlying the standard was the company's philosophy of work: although the car was made in Hungary it was a Japanese car and

[3] This turned out to be a hollow promise because in practice all it meant was that the applicant would be offered a job if the company wanted them. However, it was a significant promise because such phraseology implied that the applicants had in their power the ability to control their fate whereas this was manifestly untrue and revealed much about how the company sought to control workers.

had to be made in the Japanese way and so workers must accept a Japanese working culture; workers had to be willing to work hard doing monotonous tasks; and workers had to be willing to work in teams and learn all the jobs in the team. After this introduction the applicants spent four weeks being told the practicalities of working at Suzuki, the pay, hours, and conditions. After this the course moved to the Suzuki factory where applicants spent periods working on the line to familiarise themselves with the technology and tools and leaning how production was organised. On average once the course moved to the factory some 20 out of the 50 starters dropped out. Overall the course was meant to introduce Suzuki, its goals and strategy, to would-be workers, it explained the conditions it expected its Hungarian workers to operate under and sought to orientate and align the interests of workers with those of management and the company.

On average of the initial 50 potential recruits who took the course some 25 were interviewed. The interviews were short and simply designed to discover the applicant's education and work experience. Those selected (on average around ten people out of the 50 who started the course) were offered an unlimited contract. However during the first three months the worker was on a first period of probation and the contract could be terminated by either party at any time. During the probationary period workers were closely examined and evaluated. At the end of the three month period the workers were interviewed for a second time, this time based on a 25 minute questionnaire, to ascertain whether they were 'suitable'. The second interview was designed to paint a picture of the candidate's character and background. It covered the worker's family and its background, previous work experience, efforts

the applicants made to find work while unemployed and why the applicants thought they were unable to find employment earlier. The questionnaire sought to identify the applicant's character and whether they suited working alone or in groups. The interview concluded with a discussion about the Japanese style of work, the strict discipline, the overtime and holiday regulations, and ended by asking whether the candidate could cope with such a working environment. By the time the first period of probation ended on average two of the fifteen starters had left; some 50pc were asked to leave whilst the remainder chose to. Thus out of the fifty who started the training course on average only 13 proceeded beyond the first period of probation.

Once selected, workers were placed on a second period of probation which lasted nine months. During this period contracts could be terminated by either side immediately. Having been selected workers experienced harsh conditions. Whereas the traditional length of shifts in Hungary was eight hours (usually from 6am to 2pm) including breaks, Suzuki stipulated that workers had to spend the shift actually at line and breaks were extra and in the workers' own time. Thus the shift ran from 7am to 4.50pm and included a 30 minute lunch break and three shorter breaks each 17 minutes in length. In addition workers could be compelled to do paid overtime (receiving 150pc of the basic wage on weekdays and 200pc on Saturdays). Despite the long hours pay was low. In mid-1993 the operator's average wages were in the region of HUF 13,000 per month. This contrasted poorly with other employers, particularly foreign ones, and was not much above the HUF8000 unemployment benefit. Core workers were paid between HUF17-23,000 per month.

Significantly the shift times meant there was less opportunity for workers to supplement their pay through second jobs, and helped to enforce management insistence that worker efforts had to be saved for Suzuki. In addition to the long hours and poor rates of pay, work was intense and tiring even if the technical demands were low. Many operators, with no experience of the discipline enforced by a continuous assembly line, found the repetitive, boring and monotonous tasks particularly demanding. Quite apart from the physical exhaustion, workers also complained of a very stressful atmosphere at the plant. Quality control played a large part in generating the intimidating atmosphere. Every work place was a quality control position as each worker was responsible for checking the quality of the previous one. Likewise each team checked the quality of the work done by the team upstream. In addition, collective responsibility for quality meant that the team members were compelled to go to the aid of workers who had a problem to ensure that production continued undisrupted. Quality was also measured, individually, per team and for the entire factory, according to an audit points system. The quality of early production scored 133 out of a maximum of 147 and compared well with the average of 137 in Suzuki's factories in Japan.

The recruitment procedure, even though it had to be relaxed, created a workforce profile which was designed to meet the needs of the working system. The manufacturing side of the operation employed just four hierarchical levels. There was a plant manager in overall control of manufacturing and beneath him were 10 supervisors, each responsible for 5-6 of the 40 foremen. Each foreman controlled between 10-15 operators. The operators were divided into teams the size and

structure of which evolved as the company and production developed. Initially there were four teams, one for each of the shops (press, body, paint and trim, and assembly). In practice the teams were initially used to justify shifting workers around the shops (and thereby train them to do more than one job), and also to ease the definition of work norms, at a time when production volume was increasing erratically as part of the start-up phase. As the production volume increased the teams became more significant in establishing the nature of work. Teams became smaller and were used increasingly to measure performance. They became the main vehicle for motivating workers to improve their performance; workers began to ensure that their colleagues did not slack. Team work was also used to design flexible job specifications, representing loose bundles of between 10 and 14 different operative steps. As a result worker responsibilities were informal in the sense that they were ill-defined and could easily be enlarged. The lack of institutionalisation when it came to job definition in conjunction with the factory regime conspired to permit management consistently to raise expectations of work performance.

The production process, in part through the technology and in part through team work, was organised to make work technically easy. The vast majority of the tasks were very simple and were designed to be done by almost anybody; within four days workers were expected to know how to do all the operative tasks allotted to their team. However the company sought neither unskilled nor highly skilled workers but applicants who fell in-between the two categories. This was because Suzuki anticipated the two groups, for different reasons, would exhibit attitudes in opposition to the Suzuki working method. Thus unskilled workers were thought likely to be

disruptive and 'work shy' whilst skilled craftsmen with a trade or profession were thought less likely to accept supervisor's and foremen's orders. Instead the company established a workforce that was dominated by young workers (in mid-1993 the average age of the operators was just 20), without the bad habits of soviet production, who exhibited a general work ability. The workforce was overskilled for the technical tasks required of it but bright enough to internalise the 'soft' aspects of the work regime. However, there was no danger of a specialist or craft-like working culture developing. For management as well as workers the new job definitions rendered the traditional view of skill inappropriate. The definition of skill had been refashioned from a measurement of technical ability to the willingness of workers to accept management's will.

Central to Suzuki's strategy was the prevention of collective interest amongst workers. This was in part achieved by generating a collective identification amongst all employees - administrative and manufacturing - with the company. Equally significant was the company's use of individual contracts which excluded collective bargaining. All workers were given a basic salary but were subject to complex and detailed measures of individual and group performance. The first key element in the system occurred at the end of the probationary periods. Workers were evaluated according to four measures: attendance, effort, performance and character. In each case the workers were given a score and an overall rating of 'A' (best) to 'C' (worst) which determined which of the three base salaries they started on. Workers that were classified as 'C' (2pc of the workforce) were regarded by the company as expendable, those classed as 'B' (18pc) were deemed to be acceptable for they could be expected to

reach the level of standard of the 'A' workers (80pc). In addition to the basic salary, which varied according to the overall performance of the plant, there was a maximum 15pc bonus based on attendance.

Once workers had proceeded beyond the probationary period having been allocated a basic salary, they were evaluated and their performance graded from 'A' (best) to 'E' (lowest) every six months. The top two levels represented performance which was acceptable to the company whereas the other three automatically triggered disciplinary procedures of varying severity. Workers who performed well were considered for promotion but the number of promotions was strictly limited. Thus in the assembly hall some 8 workers out of 80 could be promoted each year. Where more people sought promotion than there were opportunities the supervisors and foremen decided who was elevated. The best 'A' workers were offered special contracts which included a spell of training in Suzuki's Japanese factories. Thus the endeavour of hard working operators was rewarded with the opportunity to go to Japan and learn how to work even harder. The exploitation of workers had been internalised. Other 'rewards' for good performance included becoming team leaders and foremen. In this way Suzuki successfully implemented a very complex internal labour market which acted as an incentive for workers not only to work hard and be ambitious but also identify with the company and be committed to its future development. It also acted to create a dual workforce split between core workers (those which had been sent to Japan) and had worked in several teams, and a peripheral group which was less experienced. At the same time it also undermined

workers when it approached the company in 1992. In March 1993 VASAS leaders had a series of meetings with Suzuki's Hungarian general manager but no accord to establish a union presence was agreed.

Despite the control that management clearly exercised there were increasing signs of resistance. Workers not only complained of the monotony and continuous nature of work but also of the lack of challenge that the tasks provided. Overtime and pay were also a considerable cause of resentment among workers. Not least although pay gradually increased to around HUF17,000 for ordinary workers and up to HUF23,000 for core workers by mid-1994, increments were often below the rate of inflation. Other evidence of workforce problems were the high level of absenteeism, 6pc, (particularly amongst workers in the body shop who worked off-line), and a high rate of turnover. Between October 1992, when production commenced, and mid-1993, more than 50 workers left the company. Some 25 had been sacked by management whereas the rest left because they could not stand the conditions and pay. Gradually the number of workers leaving continued to rise, the proportion sacked declined dramatically to 5pc, and turnover reached 20-30pc[5]. Management responded to criticism of the conditions by trying to underline that the company was a young one still finding its way in the market, and that the conditions would 'probably' improve in the future as the firm developed. Privately the management were much more concerned by the increasingly rebellious behaviour of the workforce than they admitted and started tracking workers who left the company voluntarily. They

[5] At the same time a steady proportion of the 80 administrative staff began to leave. Indeed in the course of the first eight months of 1993 six of the top ten Hungarian managers resigned their positions. This followed complaints about the behaviour of their Japanese 'shadows' and stressful working conditions.

discovered that the majority found other jobs with pay rates on average between one half and twice that which they received at Suzuki. The Hungarian managers gradually isolated the low pay levels as behind the company's inability to secure the workers' consent to a factory regime which was very different to that which they were used to. However, the Japanese 'shadow' managers forbade a new attitude to wage levels despite the fact that Suzuki paid below all of the major automotive investors in Hungary.

Despite vague assurances, and management's attempts to exclude VASAS, a number of workers established a small trade union in early 1993 which arose out of the grievances first expressed when the early recruits were sent to Japan (see above). One particular concern of the union leaders was the company's right to enforce overtime, even on a Saturday, if targets had not been met. Overtime had been enforced 12 times, including 3 times on Saturdays, and members disliked their lack of choice over the matter. Sometimes they only had two hours warning. On some occasions when workers were told to work on Saturdays they broke their contracts and failed to turn up to work. Out of fear the union, whose membership had increased to between 50 or 100 (mostly young workers) by mid-1993, was organised outside the factory and based in an office at one of the workers' homes in Esztergom. The local union made contact with VASAS and the two devised a strategy to mobilise the workers. In the light of the company's refusal to recognise the union the aim was to recruit two-thirds of the workers since under the Labour Code the management would be compelled to negotiate with workers and sign a collective agreement to replace the individual contracts which did not refer to the rights of workers at work.

However, the union's membership grew only slowly because management would not let it operate in the plant and because workers feared losing their jobs if they joined. Management offered to meet the union leaders and provided a notice board and room for them to use but the union declined to take up their offer for fear of intimidation. One condition that management put in the way of a meeting was its insistence that the union had to provide management a list of its members. Other events occurred which indicated management's willingness to use heavy-handed tactics to try to prevent the union from establishing a foothold amongst the workers. Management sought ways of identifying and undermining the union's leaders and a prominent union member's locker was searched by management where some tools were found. Having contravened Suzuki's strict rules about storing tools the worker was accused of attempting to steal them and was very nearly sacked. As a result of such treatment the union continued to operate outside of the factory and sought to recruit core workers, those which had been sent to Japan, and who were indispensable to management, by visiting them at their homes.

In the course of late 1993 and early 1994 the union increased its membership, became more visible and began to make demands of management. It remained based outside the factory. It also turned its attention away from overtime towards the crucial issue of pay. In March 1994 the union demanded a 25pc pay increase from management and threatened to hold a series of strikes if its demand was not met. However, management responded by only offering a 12pc pay increase. The union reacted by staging some short strikes. However without the support of a national

trade union, management was able to sack three of the union leaders. All three of them were welders who worked in the body shop, the portion of the factory that management had long identified as a potential 'hotbed' of aggravation, because of the absence of a continuous manufacturing process.

Volkswagen Sachsen GmbH[6]

The political changes in the GDR occurred as the VW Group faced renewed competitive pressure. Costs rose just as cheaper producers (in some cases Japanese transplants) established new capacity in the UK and on the Iberian peninsular. VW embarked on two interrelated strategies to reduce production costs. First, supply networks were refashioned, including experimentation with an innovative Toyota-type system in Saxony, and second, and arguably more fundamentally, the company sought to rework the balance of power between capital and labour. In both cases VW's investment in eastern Germany was central in the success of these strategies. Here we focus on VW's attempts to use the *Wende* to introduce a new factory regime in which management secured greater control over the labour process. In doing so VW was able to capitalise upon the role played by the German state and in particular the THA, which contributed so much to create an environment in which labour was weakened encouraging management to take advantage. As the 1990s proceeded the persistence of the consciousness-deficit emanating from the SED regime (see Habermas 1994) and its role in creating a subject-less society after unification became more clear (Häussermann 1992). Within the enterprise this was reflected in a weak political

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[6] I am indebted to Nick Marshall for making a transcript of an interview he conducted with an VW Sachsen manager on 9th December 1993 available.

consciousness and a remarkable level of deference and passivity which permitted management to wrest control over work from workers.

In the midst of the deindustrialisation of the former GDR, VW's highly political investment was well placed to benefit from what seemed to be an act of salvation by east Germans. Moreover the manner in which VW took over assets in the former GDR and the phasing and timetable of its investment, helped to secure management dominance over labour which permitted it freedom that VW did not enjoy elsewhere in Germany. In the first instance VW took over a single SAW plant and a small portion of the Kombinat's 12,000 employees but held out the prospect of gradually incorporating more of SAW's assets and workers into VW Sachsen. This created a very dependent workforce committed to the company's success so that more of their former colleagues could gain employment at the plant. The solidarity between ex-SAW workers who had subsequently become fragmented working for many different companies or unemployed, persisted at least amongst union activists. This was in sharp contrast to the individualism prevalent in Hungary. In addition, being such a high profile company, and in many eyes symbolising West Germany's post-war stability and success, VW's workers were very proud to work for them. At the same time the company widely publicised its commitment to the region - largely connected to its aim to attract local investments by suppliers - and could present its role as one of paternalistic philanthropy.

As a result VW secured a very powerful position locally in which its workforce, the remainder of SAW's employees and more generally the entire town

were dependent, and projected their hopes, on the success of the project. VW was at the centre of a local growth coalition which resulted in the generation of a remarkable degree of collective identification in the company which spilled over into the workplace. In addition the timetable of VW investment phases left room for uncertainty. Of particular significance was VW's intention to use the existing ex-SAW facility (Mosel I) until the completion of an entirely new one (Mosel II) at which point the future of the old facility would be decided. It was not insignificant that the new plant was initially scheduled to begin production in 1994 - just as the second east German collective bargaining agreement was due to be negotiated[7]. From the beginning therefore management had the upper hand as there was a thinly-veiled threat of closure hanging over the old plant.

In such circumstances management felt able to implement broad ranging changes to its normal practices in West Germany. In particular management drew upon the *leitmotif* of 'lean production' (see chapter 2) which had quickly gained considerable currency across German industry to introduce a system of labour organisation which effectively undermined VW's system of 'co-determination' as management won more control over manning levels and the intensity of work. The failure of IG Metall's strike in 1993 fundamentally to alter management's course, served further to illustrate the impotence of organised labour to prevent management's onslaught despite the application of west German labour laws in the new Länder.

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[7] The collective agreement was actually re-negotiated in early 1993 (see chapter 4).

At the centre of VW Sachsen's new system of labour organisation was a form of team working. It established the organising principle for all other management strategies and the terrain of struggle between management and the IG Metall-dominated works council. In December 1990 VW took over management responsibility for Mosel I and the labour representation system was changed in accordance with West German labour law. In January 1991 a works council was formed but the personnel were exactly the same as those who sat on the council of shop stewards under the SED regime. In April 1991 an election was held to appoint a new works council (according to IG Metall's constitution) which took over in May. Although some of those elected were the same people who had been active prior to the changes, in order to demonstrate discontinuity IGM persuaded VW to employ a westerner, Herr Dieter Riemann, who was active on VW Kassel's works council in west Germany to stand for chair of the new works council. He was duly elected. The second most senior works council representative had been a labour representative under the old regime when he worked for SAW. In total the works council consisted of 15 members all of whom were members of IGM and the majority of whom were also shop stewards. Despite the presence of Herr Riemann and new IGM offices in Zwickau (which had 70,000 local members at the time[8]) and Dresden, the works council was largely unfamiliar with west German labour law and spent a lot of time learning the system at the same time as management undermined it.

[8] When IGM first moved into Zwickau in 1990 it recruited 90,000 members in south-west Saxony. As deindustrialisation proceeded and unemployment increased membership fell to just 22,000 at the end of 1993.

Almost immediately it became clear that management sought to exclude the works council from being involved in decisions and strategies that were the norm in other VW plants. Recruitment was a case in point. In the first stage of the investment VW took over management control of the paint and trim and assembly shop (Mosel I) from IFA-PKW-SAW via Sachsenring Automobilbau (SAB), a joint venture with the THA. However, it did not automatically inherit the 1,000 workers in the facility. Instead SAW workers had to apply for jobs at VW's operation owned by SAB. This allowed VW to select the best of the workers, the youngest and the healthiest, who had previously worked on the Trabant assembly line[9].

Initially VW employed 450 workers, sufficient to establish the operation, but as VW's plans developed, additional people were recruited. By the end of 1993 VW Sachsen employed some 2,095 workers (plus 400 white collar employees), comprising 1,200 in the trim and assembly shop, 300 in the paint shop (both Mosel I) and 350 in the new body shop (Mosel II). Effectively VW was able to select workers from the remaining pool of ex-SAW workers numbering in excess of 8,000. As a result VW's management could be highly selective in recruitment as it sought to employ younger people with qualifications and considerable experience. The average age of the workers was a relatively high 38 and only 50pc had previously worked for SAW. However, all were highly skilled and had worked in the local engineering industry[10].

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[9] In addition the workers at Mosel I were some of SAW's best employees having been selected for transfer to the new plant in the mid-1980s from the older sites in Zwickau itself. In addition SAW's Mosel plant was built and the workforce socialised at a time when state planners were demanding a stricter working regime because of national economic stagnation with the result that the factory operated in a manner far more similar to that in the west than was generally the case in other SAW plants. Thus within the ideological constraints of the political system shop stewards acted much more in line with the interests of workers and less like an organ of management and the SED.

[10] This contrasted with VW's plants in west Germany where unskilled workers were employed in addition to skilled workers.

The contrast to the strategy pursued by Magyar Suzuki could hardly have been greater, but perhaps reflected the different paths of transformation as much as their different goals.

VW Sachsen used a particular procedure to select workers it thought would be best suited to work in teams. As a result management included team and group leaders in the process and used psychological profiling techniques to identify suitable people, despite resistance from the works council. The works council tried unsuccessfully to encourage management to select individuals who faced particularly severe problems in the labour market, namely women and older people. However management sought to appoint young people who did not have a record of political activism. When VW began recruitment the local IG Metall office had only recently been established and had not compiled a list of local members with the result that management was unable to identify potential 'trouble makers'. However, and with some irony, as IG Metall's presence in the region grew, the compilation of a membership list permitted VW the opportunity to exclude IG Metall members. In this way management sought to use mass unemployment beyond the plant to forge a workforce unreceptive to the mobilisation attempts of the works council and trade union.

If the recruitment procedure was designed to create a management-friendly workforce the system of labour allocation was designed to increase management control over work. This was achieved by reducing line management to a minimum and permitting workers the carefully controlled freedom to work in the manner of

their choosing. Foremen were replaced by Group Leaders, mostly ex-SAW middle managers under the SED regime, who were responsible for discipline. Each Group Leader was responsible for up to three teams of workers. By the end of 1993 the workforce comprised 162 teams in Mosel I and Mosel II. Each team consisted of up to 11 workers and had a leader who was appointed by management and replaced sub-foremen. The other major change was the inclusion of maintenance workers with operators in the teams depriving them of their former higher status. Within the teams the workers rotated and operated according to a skill matrix system borrowed from Nissan's plant in the UK. The teams were used as a disciplining system and thus operated according to a supplier-customer relationship with the result that competition developed between them. They disciplined one another in exactly the same way as members disciplined each other within the teams. Elaborate criteria were established to measures the teams' performances. The team system was thus designed to place a higher degree of responsibility on to the individual worker constrained within a social organisation of labour that was highly particular and designed to generate a stressful environment in which workers were disciplined without being told what to do in an authoritarian manner.

In large measure social control was materially based not only in the existence of the teams themselves but through the establishment of control over the quality of work. This was achieved in two ways: the first was the particular attitude towards *quality performance* (in a narrow sense) and second through procedures designed to improve the *quality of work* (in a broad sense). Two management strategies were of particular significance in this respect: the introduction of Total Quality Management

(TQM) and continuous improvement programmes (or *kaizen*), both borrowed from Japanese industry. Crucially, both devices blurred the distinction between quality performance and the quality of work and could therefore be used to exercise control over not only how much work was done but also how it was done and crucially *why* it was done. Once the matter of why work was done had been established the issue of how much and how became merely a technical and management concern. However, and this is the central point, the internalisation of the 'technical' issues established *why* work was done. In short the technical and social basis of work were intertwined in a mutually supporting way.

With the introduction of TQM everyone was made responsible for quality and its management. Thus significant elements of the quality control management system were built into the team working system. Teams were responsible for the quality of their work and downstream teams controlled that work-in-progress supplied by the team immediately upstream. Within the team all the members were collectively responsible for the quality performance of the team as a whole. Quality performance was calculated for each team, for which the leader was responsible. Thus the system was not only a means of achieving a certain quality performance but also establishing an informal control mechanism. In this way, the apolitical issue of quality in part legitimised the exercise of social control (a certain performance had to be achieved) and in part replaced it (in the sense that the quality performance target was beyond the arena of struggle). In this way control was concealed and obscured. The final element of control, namely why work was done, was achieved through continuous improvement programmes.

Having established the team system, management divided the plant's different production shops into separate cost centres each with responsibility for their own budgets. In this way each shop was measured according to value-adding processes, non-value-adding processes and waste. The task of each shop was to ensure that the former increased and the latter two costs were reduced. As with quality, the performance criteria and forms of control were established together in a self-supporting manner. The vehicle for establishing the procedure of increasing efficiency involved the implementation of a continuous improvement system which VW entitled KVP (this was later replaced by KVP^2) and which consisted of problem-solving workshops and a suggestions scheme. Accompanying KVP^2 was the idea of benchmarking, namely the transparency of performance and its comparison with other plants. For VW Mosel the aspiration was to match and exceed the success of Nissan's plant in the UK and become the most productive plant in Europe. In this way management sought to establish why work was done: namely for the benefit of the company (and therefore not simply to earn money) and used this to untap workers' constructive potential for improving the efficiency of the plant. Thus KVP^2 meant that workers could be compelled to participate in workshops designed to improve efficiency for the company thereby undermining worker interests and ability to control work for themselves.

In this way workers were socialised in a very different manner from that in VW's plants in west Germany. By developing a corporate-centred identity management sought to appeal to workers' individual consciousness above that of their

collective sense of solidarity with their fellow workers; as one manager from west Germany put it, 'the workers here are willing to do anything for money'[11]. Control was intertwined and exercised through a complex matrix of team working, quality control, and continuous improvement (via cost centres and KVP workshops) which centred on a subtle and sophisticated psychological control that depended on the conditions of transformation that stretched beyond the workplace.

Unification forged an environment in which innovative forms of work were legitimised and worker interests could be denied. In such circumstances management enjoyed the ability to establish new norms largely without both worker resistance and input from other institutions - since there were none to speak of. As a result management was able to argue that the changes were universally accepted, a device which further prevented the development of any collective action. In addition western management behaviour, in particular the 'openness' of the approach and transparency of work (which on the face of it seemed far more positive and humane than had existed under the SED regime) contributed to a feeling amongst workers that management had their interests at heart. With such a viewpoint it easy to see why, initially, capitalist production was deemed to be more genuinely socialist than the previous regime. Despite the fact that the former GDR became part of Germany, with all that that entailed, there were no rules, no blinkers and no rigidities; as the manager responsible for new work organisation put it, somewhat ironically, 'there are walls in the west but not in the east'[12]. After a pause he emphasised that the labour rules in

11 Interview, 8th September 1992
12 Interview, 27th October 1993

eastern Germany were the same as in the west. Later the same manager developed the thought:

> "Labour relations and bargaining with the trade unions are exactly the same as in west Germany except for the fact that here they don't know the rules".[13]

The introduction of team working raised two important issues for the works council. First, management used the introduction of team working to increase the intensity and the nature of work. The intensity of work was increased in two ways. In the first, and most visible way, management enlarged jobs by forcing teams and their members to accept additional responsibilities; the flow of parts, quality, and basic tool maintenance. The second method of intensifying work was more subtle and more difficult to counter since it centred on the way bundles of tasks were organised, given time norms and then allocated to a set number of workers.

To organise work and to calculate time norms VW used a system called MTM to establish the maximum work effort that workers could sustain over a given period of time (without undue degradation of the workforce). In order to attempt to evaluate the way in which MTM was used in Mosel it is instructive to compare it with VW's headquarters plant, Wolfsburg, where the Golf III was also assembled. At Wolfsburg's Golf assembly line the MTM system was used to calculate work norms and times for individual workers. This was because the line was designed so that only one task and one action was required at the workstation. This meant that there were

[13] Interview, 27th October 1993

many more workstations at Wolfsburg with the result that the line moved faster, three metres every minute, and was physically longer.

In contrast, at Mosel the unit of labour in the MTM calculations was the team rather than the individual worker. This meant that 'the same' MTM system resulted in very different work norms and times in the two plants. The line at Mosel moved three metres every two minutes and thus travelled at half the speed of Wolfsburg. To compensate for that, workers (in teams) were required to do considerably more tasks with the result that there were less workstation and the length of the line was shorter. The fundamental difference was that whereas at Wolfsburg there was time enough for each worker to do only one task with one movement, at Mosel workers were required to do more tasks at the same work station, including doing several tasks with one movement.

At Wolfsburg the MTM calculations were used to ensure the standardisation of effort and time between individuals on the line. However, at Mosel where the team was the unit of labour, MTM was used not to standardise work between individuals but across teams and to optimise work within the team. The assumption made was that the team automatically standardised work itself. This enabled MTM to be operated in a different way by reducing the amount of time 'wasted', that accounting for balance delay problems. However, in practice this meant that since the time norm for a specific task was not defined in isolation but as an element of a bundle of tasks, balance delay was said to approximate rest periods with the result that the MTM calculation did not have to include as much down time as in Wolfsburg. However, the

assumption that team members rested at different points in the work cycle because of the effects of balance delay may be unjustified. In other words by changing the way work norms were calculated balance delay was almost entirely eliminated without any physical change to the production process. However, in reality work was intensified because team members had to manage balance delay problems within the overall constraints of the time norm. The result was that in place of a standardised work effort the intensity of work continuously and rapidly varied from hard to easy depending on circumstances. However, management could argue that theoretically the intensity of work was the same as that at Wolfsburg over a given period of time.

The overall effect was that whereas at Wolfsburg the time norm included 10-20 seconds of rest in every 10 minutes in Mosel the figure was only 8-12 seconds. However, evaluation of work loads in the two plants was further complicated by the fact that the workers at Mosel were responsible for more indirect tasks in addition to the direct ones than was the case at Wolfsburg. Management claimed to compensate for this by excluding team leaders from the MTM calculation even though they spent 60pc of their time on the line. All this served to obscure the intensity of work and prevent adequate comparison between Wolfsburg and Mosel. However, crucially MTM based on the team served to informalise time norms, within the team.

Whilst the works council accepted management's insistence that MTM work norms were the same as in Wolfsburg only organised differently, the works council representatives who had been to Wolfsburg to observe production there were convinced that management had used MTM to intensify work in Saxony. This was

indicated by it taking 33 hours to assembly a Golf in Wolfsburg compared to just 24 hours in Mosel (however this in part reflected the low level of vertical integration). The result was that workers complained that it was difficult to keep up with work, especially if the team was having to cover for an absent colleague. The relatively high rate of absenteeism of 7-10pc, compared to 5-6pc at Wolfsburg, prompted the personnel department to investigate only to find it genuine, and therefore indicative that the pace of work effected the workforce.

In addition to more intensive work loads the team working system also included a mechanism for increasing work loads as teams became more efficient. Once established the teams were given a 'credit' representing normal efficiency thus as efficiency gains were made, and costs were reduced, the team's credit increased. Management could thus keep a close eye on how productivity changed. When a team's credit increased by a significant margin the number of people in the team was reduced and the excess labour was re-deployed to the press shop which was in its start-up phase at the time.

In the same way as the intensity of work was altered by team working so too was the nature of work. Work changed in three important ways: the lengthening of cycle times, the improvement of ergonomics, and the disintegration of tasks. First, the introduction of team working accompanied the lengthening of cycle times and a move away from monotonous work associated with classically Taylorist labour processes. Thus within the teams workers were said to be freer to allocate tasks amongst themselves. The teams were said to be self-organising in the sense that the workers

managed themselves. In addition, team working, according to management, was designed to enhance the degree of the workers' involvement in work as a means of generating identification in their work, job and company. However, in reality the self-organisation of team working was a device employed by management to secure the consent (and crucially the motivation) of workers. Thus self-organisation of teams was permitted only within certain parameters which suited the interests of the company and may have only coincidentally increased the satisfaction of work in the eyes of the workers. Thus a major example of self-organisation was the way in which workers were able to organise their holidays amongst themselves. This may have given the workers an additional convenience but its purpose for management was to ensure that the plant did not have to shutdown for an annual holiday since workers could arrange to stagger their leave. Workers were only given certain freedoms and only then once other forms of control had been established.

Second, management improved the ergonomics of work by introducing power-assisted tools on to the assembly line which was the same one that was used to assemble the Trabant. For many workers who had worked on the Trabant line, work was much easier. Parts for the Trabant were often badly made and did not fit with the result that workers had to be inventive and improvise through reworking which led workers to liken Trabant assembly to 'sticking' parts together whereas now it was genuine 'assembly'. The ease of work (the absence of technical challenge) meant that they became less skilled and were transformed from specialists to generalists. However, rather than accept the inevitability of being de-skilled, workers sought to skill themselves. This was just one indication of the way management had

successfully redefined the nature of skill, and equally important, skill acquisition: skill had become a function of how many different workstations a worker could operate.

The lengthening of cycle times, which made work more varied and more interesting, and improved ergonomics, crucially allowed management to present the intensification of labour as the humanisation of work which was more politically acceptable to IG Metall at a regional and national level and helped to convince workers that management had their interests at the forefront of its plans. After all management was trying to make work easier and easier, and certainly less chaotic than under the old system. In this way management was able to present the transformation of work as a manifestly good thing for all.

A third way in which work changed centred on the growth of off-line work within the plant and at the bigger scale on the plant's low level of vertical integration (see chapter 5) and high level of outsourcing. The works council and union were unwilling to see outsourcing used as a device to cut costs by 'exporting' jobs to other regions. In this way IG Metall mirrored the VW management, by also presenting a commitment to the region. Thus the local office's rally cry was 'Live and work in Saxony'. Moreover, workers were acutely aware that workers in supplier factories could do the tasks they were presently doing for considerably lower rates of pay and benefits[14]. In response the Mosel works council attempted to encourage unionisation and strong works councils in local suppliers, albeit with little effect. In one instance

[14] Events at VW-SKODA in the Czech Republic, where suppliers were invited to take greater responsibility by positioning workers in the SKODA factory and on the line to fix their components onto the vehicle, had important implications for VW Mosel.

management indicated that it wished to outsource the final assembly of the cockpit module to VDO which had a small plant in Glauchau some five kilometres to the north of Mosel.[15] However, the works council opposed this and sought to defend its position by inviting the VDO works council to a meeting at VW to discuss the issue. VW's works council argued that it disagreed with the externalisation of production not on the grounds of jobs but instead on the basis that VDO did not pay its workers the tariff rate agreed with Gesamtmetall because workers had been allocated to wage groups 3 and 4 compared to 7 and 8 in Mosel. In this instance VW's management backed down but in raising the possibility gradually and almost imperceptibly extended the boundaries of what could be deemed acceptable. Issues such as these, although crucial in regional and national terms, only served to distract the works council from internal battles with management and indicated the weakness of labour in the region.

Second, management also used the introduction of team working to refashion the balance between labour and management, in part by undermining the traditional role of the works council by using the teams as the primary mechanism for communicating with and controlling labour. The context of labour relations at the plant helped to reinforce the view that management was determined to use the plant as a vehicle for altering labour relations. Thus the plant's position within VW was significant for two reasons. First, since VW Sachsen was a GmbH and a wholly owned subsidiary of VW AG's worker representatives did not sit on either the VW AG General Works Council nor the VW Group European Works Council with the

[15] VDO already sub-assembled the cockpit module.

result that they were deprived of the resources of those important organisations. Crucially it also meant that there were fewer obligations on management to consult the works council than would otherwise have been the case[16]. Second, the collective agreement at Mosel was not based on the VW tariff (which covered all of its other plants) but the Saxony agreement (which was based on the one for the Bavarian metal industry). In addition to the lower rates of pay that applied in the east it also meant that workers enjoyed less benefits and VW non-wage labour costs were 30pc lower than those in western Germany.

In addition, the legacy of the Soviet regime created an environment in which labour was weakened. First, a demobilised and subject-less society acted as a barrier to the generation of workers' collective interest. Not least absence of networks amongst workers during the soviet regime bequeathed a situation in which workers continued to see themselves as anonymous, isolated individuals who bowed to pressure to avoid conflict. Thus despite the very high numbers of workers who joined IG Metall, largely because under the soviet regime union membership was compulsory, a remarkable level of passivity existed amongst the workforce. Second, the works council representatives were unacquainted with German labour law and were distracted by the need to learn the *habitus* of how to bargain effectively with

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16 This provoked ill will amongst management in VW's plants in western Germany who considered that the discrepancies in conditions undermined their position within the company, which had begun to compare the productivity and efficiency of different facilities. Moreover, the different labour agreements forged a wedge between workers and management in different plants with the effect that 'plant-level' interests developed amongst local management, the works council and local IG Metall officials. It legitimised a new harsher management style and provided a weapon (the fear of jobs being 'exported' to eastern Germany) with which to pressure workers to accommodate the new approach. In this way the relationship between management and labour in Mosel had significant impacts across VW AG as a whole, one of the country's most visible companies and an important bulwark of co-determination.

management. The result was that the works council in crucial respects was either unaware of its rights to co-determination or unable/unwilling to exercise them. In particular the works council often failed to exercise its right to force management into negotiations over manning levels. This itself was a function of the dependence of works councils on shop stewards supplying information and mobilising resistance. However, the shop stewards were new to the system too and often uncertain about their role and how to combat management.

The unusual political situation arising from unification tended to create sensibilities which distracted workers and their representatives from more important longer term issues (such as the team working system itself). Thus in the first years following VW's take over one of the most significant issues concerned individual's former links with the STASI and SED. Whereas the management sought to investigate individual's pasts, and prevent informers being employed it was not possible to avoid such cases. Concern centred on the Group Leaders many of whom had been SAW managers under the former regime and were former members of the SED. Their links with the old system was one source of resentment and resulted in them being nicknamed the 'Red Socks'. However, since the group leaders were responsible for personnel and disciplinary issues they enjoyed considerable power. For many workers the group leaders, shouldering the need to prove themselves to be good harsh capitalists, behaved in a similar fashion to the despotic foreman prevalent under the soviet working regime (see Burawoy 1985). The result was that labour representatives were distracted by individual cases from assessing the significance of the existence of group leaders, who were indeed foremen in another name.

One other factor bound up in the politics of unification was also important in determining the development of labour-management relations. In this case it was a more ambiguous factor. On the one hand the organisation of work under the SED regime was such that it made it easier for VW managers to introduce team working; however on the other hand the similarity between the two regimes of work created problems. Thus the soviet organisation of labour in which workers worked in brigades meant that team work was not a wholly new concept. Likewise the old dependence on the state owned enterprise assisted in generating identification with the firm. Other similarities included the high emphasis placed on targets and auditing results. However, perhaps most important was the similarity in ideology. Thus the soviet model's use of 'work for the good of all' as the main motivational device was very similar to the ideas behind enterprise democracy and corporate identification associated with lean production. Thus political sensitivities served further to obscure management's strategies to enhance control over work.

The team working system also directly undermined the influence of the works council in two ways. First, the informal organisation of labour undid solidarity. The devolution of responsibility from the plant level to the level of the shop (cost centre) and team meant that decisions were taken informally on the shop floor away from the eyes of the works council. This meant that issues on which the works council might have expected to make a collective decision were not brought to its attention. The effect was that the acceptability of management requests became individualised as workers decided what they would and would not do based on their own self-interest

without reference to labour representatives and the collective interest. Moreover, the insecurity and isolation of workers and teams ensured that management was able to win concessions from workers that the works council might have been able successfully to counter. Second, team working excluded the works council and shop stewards. Not only were some working conditions not brought to the works council's attention but communication between management and labour was via the teams and not the works council. The result was that on the shop floor the relevance of the works council became questioned and its influence marginalised.

Thus as the works council was being formed management was in the process of undermining it through the establishment of team working. This meant that the works council was presented with a *fait accompli* and had to try to make an agreement over team working after it had been established. In 1992 the works council tried to secure a set of assurances from management. These included that workers would not be exploited within the teams, that management would not use the teams to undermine co-determination and the powers of the works council by unilaterally controlling the teams outside agreements between the council and management.

However, in many respects the works council had lost the struggle over team working before it had even begun. Management only gradually increased the responsibilities of the teams and the power of the team leader with the result that the works council was often too slow at recognising management's strategies. As team working became more established management began to be more direct. In addition to establishing an alternative form of control over workers, in the course of 1992

management launched explicit attempts systematically to undermine the power and role of the works council in a number of ways. First, compared to other VW plants, the management was less generous in providing the resources - such as time away from the line in which to consult managers - for the works council members. Second, management sought to exclude IG Metall shop stewards from certain parts of the plant, such as the paint shop. This strategy was usually accompanied by increases in the volume of production - as part of the start-up of production of the Golf III - without any corresponding increases in manning levels. As a result the intensity of work only gradually became apparent as output increased by which time it was very difficult for labour representatives to combat it. Thirdly, management at Mosel had responsibility over the engine plant at Chemnitz and the small cylinder head plant at Eisenach and were able to manufacture issues in these two plants, which had very small and weak works councils as a way of distracting the Mosel works council.

At the heart of the issue was a debate between management and the works council as to whether the team system was an additional communication system or a replacement for the role played by the works council. However, the works council itself was split over the significance of team working. For some the introduction of teams was an irrelevance which had no implications for labour representation but for others the new labour organisation was a means by which management could exclude the works council from operational issues, such as manning, on the shop floor. This split in the works council contributed to weakening the council and limiting its effectiveness in countering management strategies[17]. This culminated in a struggle

[17] The works council was not assisted by IG Metall's ambiguous approach to team working in general. Although the union was split the official policy was that team working should be welcomed as

between the council and management over the role and manner of the selection of the team leaders.

For management the team leader was regarded as the lowest rung of management whose role was to co-ordinate the essentially self-organising teams. However, the works council feared that as line management was eliminated the team and the leader would become more important and increasingly act less as a co-ordinator and more like a traditional foreman telling workers what to do. Initially, management wanted the team leaders to be elected by the members as a way of cementing a new team- and firm-centred collective consciousness. At this time the works council opposed the election of team leaders as part of its outright rejection of team working, fearing that it would undermine its elected representatives. However, as the works council began to realise that it could not stop management introducing team working they campaigned for the team leaders to be team representatives or team speakers elected by the team's members in a manner connected to the election of works council representatives. In this way the works council sought to intertwine the team and labour representative structures on the shop floor. Workers would raise issues of their interest within the team and then if needs be they would be passed on to the works council to resolve if necessary. However, by this time management itself had altered its position and wanted to reserve the right to appoint permanent team leaders. Once appointed, team leaders, usually the most highly skilled team member or someone with good communication skills, were given additional training in management, motivation and 'moderation'.

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part of the humanisation of work and the first step towards genuine group work or Kalmarism.

The significance of the role of the team leaders stemmed from the ambiguous and liminal position they fulfilled between management and workers. Thus management sought to define the team leaders as both the lowest rung of management and *primus inter pares* amongst their team colleagues. Crucially the team leaders were classified as a worker and not a salaried employee. In this way the boundary between management and workers was blurred as a way of obscuring the conflicting interests of the two groups within the firm. The creation of a cohort of team leaders, who were paid a bonus on top of their basic worker's pay, created a new hierarchy and an elite group of 'workers' (they worked on the line, and wore the same uniform) committed to management. Nevertheless, even some of the team leaders seemed not to understand their role as was indicated by some of them participating in a strike in May 1993.

Following long protracted negotiations management and the works council came to an agreement surrounding the team working system and how labour was to be represented. It was agreed that every team would have a shop steward in addition to a team leader. Thus in teams where no shop steward existed one was elected. In such circumstances the shop steward and team leader met with the team members at the beginning of every week to discuss the week's production schedule and plan how to cover absences from work. Likewise if problems developed, such as a worker 'concealing effort' then it was as much the shop steward's job as the team leader's to deal with the offender. However the relationship between the team leader and shop steward sometimes created problems. The two most common problems in the eyes of

the works council were the team leader failing to pass on information to the shop steward and the team leader and shop steward establishing a coalition within the team to demonstrate their superiority. Thus as far as the works council was concerned there was no inherent conflict of interest between the team leader and the shop steward, only individual cases where things did not work properly.

To further complicate the picture it seemed that in some cases the shop steward and the team leader were the same person. The works council had thus apparently become convinced that the two roles were not contradictory and that the interests of the team (leader) and the workers were the same - at least up to a point. This was despite the view that in some cases shop stewards (elected in 1991) who were subsequently appointed as team leaders and given the bonus payment had as a result began to play a role less like that associated with a shop steward and more like a team leader or junior manager. In many respects the agreement meant that the works council contributed to management's strategy to conceal the interests of workers behind the umbrella of the success of the company.

It seemed therefore that the works council had succumbed to operate within rather than struggle against management's preferred system of labour organisation. Overall there was a tendency to accommodate rather than challenge management, which in part reflected a division within IG Metall between those in western Germany who sought to struggle and those in the new Länder who were more individualistic and accommodating. The division was reflected in the works council. In particular it centred on the issue of the introduction of a third shift. The chairman of the works

council, the westerner Herr Riemann, wanted to resist management plans but had to back down because all the other representatives wanted the extra shift to allow the workers to earn more money[18]. However, the works council did resist total incorporation. One reflection of this was its refusal to accept an expenses paid visit to SEAT's plant at Martorell in Spain on which Mosel had been based[19].

However, the early years of the plant were not all about the works council failing to prevent the introduction of a system of labour organisation which threatened to undermine elements of the system of co-determination. There was also resistance by workers including the first major post-unification strike which had been held in the local area in May 1993. The strike seemed to mark the beginning of a new phase in the labour relations in the plant and beyond it in the local area in which workers recognised and began to seize on their powers of influence and resistance as a mobilised political force. Moreover the pretence previously employed by management that their interests and that of the firm as a whole coincided with the workers' interests (and those of the region) was undone as management tried hard to prevent workers from joining in the industrial action. In particular the Group Leaders went quite some way to try to persuade their workers not to participate in the industrial action. Indeed following the strike some of those who continued to report for work said they had done so because their group leader had threatened that they would lose their jobs if they joined in the strike. According to the works council some of the group leaders sympathised with the action but feared that if their workers

[18] As it happened as over capacity developed in VW's plants introduction of the third shift was abandoned.

[19] The works council at GM Europe's plant at Eisenach had been roundly criticised for accepting an expenses paid trip to North America to visit a number of GM plants.

participated they would not be looked kindly upon by shop management. This was one indication of the way discipline in the plant operated not only for workers but also for different layers of management. As a result in the first two days of the 12 day stoppage some 300 workers continued to work. This resulted in confrontations at the factory gates as strikers, and in particular a core group of around 150 activists who picketed the plant, tried to persuade their colleagues not to work whilst group leaders sought to entice them into the factory. Following these confrontations management took steps to prevent them from being repeated by informing those who wished to work that they could report to a local supermarket to be registered before being allowed to go home.

Of those who continued to work some 100 were group leaders or team leader, a further 100 were adamant in their opposition to the strike and the remainder later changed their minds and actually joined the union. The strike helped to identify a workers' interest and thereby define the role of the union and the works council. In total the level of unionisation at the plant increased from 80pc to 90pc. However, the strike had also created a division between those who participated and those who did not which served to colour relations between colleagues for some time after the events themselves. In some instances team members refused to work in the same teams as those who had not joined in the strike.

However if the strike in May 1993 had bolstered the power of IGM and had sought to establish a workers' collective interest above that of the firm, this was soon undone. The transformation of work and the labour relations environment at Mosel

were significantly effected by the German recession and VW's subsequent over capacity towards the end of 1993[20]. As a result the project in Saxony was delayed, with DM1.8bn of the DM4.7bn commitment having been spent, and the opening of Mosel II (which had been scheduled for 1994) was postponed until either 1996 or 1997[21]. With work on the new facilities effectively brought to a standstill those working on the site declined in number. The postponement also affected the morale of the workforce and the balance of power between management and the works council. The result was that, with expansion delayed there was an over supply of labour within the firm. In addition despite an annual capacity of 73,000, production in 1993 was confined to 66,000[22]. As a result 'overmanning' occurred and as efficiency gains were achieved in certain parts of the plant, the personnel department found it difficult to reallocate labour to other parts of the site (work on the press shop had stopped). More importantly the vulnerability of the investment had been indicated which had an important impact on the labour relations environment which altered fundamentally as the works council was put on the defensive. Instead of the works council making demands on management, the management was able to use the lever of further investment as a weapon to urge it to behave in a co-operative manner. The continuation of the project depended on the flexibility of the works council and local IG Metall officials to be more accommodating to management's wishes.

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[20] This resulted in the introduction of a four-day week rostering system, after a period of short-time working, in agreement with IG Metall as a way of avoiding mass redundancies.

[21] At the same time the opening of the new engine plant at Chemnitz was put back from 1994 to 1995/6.

[22] It was not insignificant that the anticipated production volumes known to the works council were considerably higher: 78,000 in 1993 and 64,000 in 1994.

The transformation of work at VW Sachsen served not only to intensify work but also illustrated the 'hollowing out' of Germany's system of co-determination and its replacement with co-management. This had occurred because a social organisation of labour had been successfully established which enabled management to appeal to workers' individual consciousness as participants in a pioneering project above that of the collective worker struggling with management. In achieving this management had depended crucially on the national and regional paths of transformation. It remained to be seen whether the intensification of work, as production volumes increased, would provoke renewed labour struggle.

6.3.2 Ford in Hungary and GKN in eastern Germany

Ford Hungaria

Ford used its investment in Hungary to experiment with a new type of factory regime. In particular, drawing on a body of increasingly influential ideas in US business theory entitled 'Fifth Discipline', Ford sought to create a self-learning organisation that could rival the efficiency of manufacturing in Japan. The recruitment of the workforce was central to the achievement of its aims. The plant was located on the outskirts of Szekésfehévár, one of Hungary's five major cities and a centre of the engineering industry (including IKARUS's municipal bus assembly plant). The local labour market was dominated by specialist engineers and other technically skilled workers. As the state-owned enterprises, and especially the adjacent Videoton (the consumer electronics producer), shed labour Ford could be highly selective in its recruitment. When the first 120 jobs were advertised Ford was inundated with more than 7,500 applications. Even in later phases of recruitment

there were still in excess of 10 applications for every vacancy: on average three out of every ten were offered an interview and one out of the three was offered a position at the company.

In the first instance applications were screened and divided into those who met the company's selection criteria (or who could be expected to do so) and those who did not. After a second filtering process candidates were invited to the factory and given three tests which examined their intelligence, technical competence and concentration. Those who performed best were selected for interviewing. The interviews reflected the sort of self-managing labour organisation that the company wanted to instil in the workforce. Once the first few core workers had been selected by management, the selection procedure was opened up to include workers. Potential employees were interviewed at least twice by teams, comprising management and workers, who conferred and selected the candidates. Thus the teams were seen to hire and employ their own members. In choosing the workforce the company sought individuals suited to a team and self-organisation environment. The high level of technical skill in the local labour market meant that selection panels placed great emphasis on applicants' character and interpersonal skills. Thus the company was very keen to weed-out strong-willed individuals with egotistical characteristics. Since many of the recruits had work experience in state-owned factories management restricted the number of people from any one plant to prevent the importation of any 'bad habits' (such as a sense of collective identity amongst workers from the same plant). Similarly the company sought to create a varied workforce. Although the average age was 35, Ford employed a number of older workers who were intended to

have a moderating influence on the younger ones. For the same reason 50pc of those selected by the company were female. The company also sought to create a dependent workforce by stipulating that workers were not allowed to hold 'second jobs'.

Once appointed the new recruits were given a permanent employment contract, allocated to a team and given training. Each worker received some 300 hours of training over a six week period. The first recruits formed a core workforce to be used to train later recruits and as a result they were trained for a longer period of nine weeks, which included a spell in a similar plant in Portugal. The training concentrated on technical, social and business issues. The technical training, in addition to on-the-job experience focused on the teaching of statistical process control methods. The social training centred on imparting leadership, communication and problem solving skills. The business training provided an opportunity to teach the worker about how firms operate in a market environment. In particular workers were told about Ford's business, why it had located in Hungary and what was expected of the plant. By making workers party to business strategy management sought to encourage workers to act and think like managers. Training was not simply seen as a one-off process but rather a continuous exercise in which workers were given access to resources to enable them to develop their skills in different ways. Thus the company established a computer room which all employees could use to develop their own general skill and education level. The aim was to create a learning company.

Training and other forms of communication were used to prevent barriers developing between different groups of workers and so to raise collective identification with the company. All of the plant's employees (including the 70 sales and administrative personnel) were trained to work on the line and were expected to do so if required. Likewise operators were expected to work in the office if it was necessary. To reduce barriers all employees were salaried and met every two or three weeks to address questions, and solicit comments and complaints. In addition, three times a year all the employees were taken off site for two days to discuss particular themes relating to the plant's performance. Thus communication was used to generate creative development through feedback amongst employees.

There were no real job classifications nor demarcation but instead two types of manufacturing employee at the plant. Half were SOM workers (set-up, operate and maintain) and the rest were skilled workers (engineer/maintenance). Thus there were no written-down job specifications or labour standards: everyone was expected to work on the line and everyone was required to do some maintenance work. Job descriptions and the responsibilities of workers were left purposely vague. The production process was highly automated (labour cost accounted for just 4pc of total costs) with the result that operating functions were technically simple. The workforce selected had a minimum of 11 years education and was overqualified for the technical challenge that the jobs offered. The workforce was divided into two large teams, one for each of the two products (ignition coil and fuel pump) manufactured at the plant, which were in turn divided into subgroups (each comprising between 6 and 21 workers). Workers moved from subgroup to subgroup every nine months. Within the

work-teams workers first rotated every month; however since this generated resistance rotation became steadily more infrequent. In mid-1993 the ignition coil line employed 35 workers divided into three teams responsible for the three elements of the production process.

The work teams were intended to have a psychology of common self-interest and to be as self-directing as possible. This also included self-disciplining and thus the groups banned their members from smoking in the workplace - a sensitive issue in Hungarian factories. In order to eliminate the need for supervisors the personnel department set weekly production targets to ensure that the plant met its orders from other Ford plants elsewhere in Europe but the scheduling of work was left to the teams. At the beginning of each week the teams met to plan the week's work. The management expected the teams to meet the targets they had 'set for themselves' by the end of the week. In connection with this it was perhaps indicative that the main complaint with the Labour Code when it was introduced in 1992 was its restriction on overtime. Management were clearly set on establishing a working regime which depended on self-motivation. In order to ensure that workers worked hard they were expected to do everything in their power to ensure targets were met and discipline was dealt out if appropriate. The legality of overtime was an important part of the strategy.

The only competences beyond the team were the setting of wage levels and the dismissal of workers. The teams were set-up to operate like mini-businesses within the plant and were evaluated according to input, throughput and operating expense

(costs). In order to make the teams operate as effectively as possible each team was allocated a 'facilitator' (for a six-month period), who was usually an engineer who had been specially trained to resolve problems and assist in interpersonal issues. According to management the facilitator operated in a quite different manner from that of team leaders elsewhere, fulfilling the role of a resource upon which the teams could draw to improve their effectiveness. Seen in another light the facilitator was an ideological device to assist workers internalise the 'management view' since they also coached and counselled workers and were the point of liaison between management and the team.

The extent to which management devised a remuneration system which took pay out of the realm of bargaining and into a very technical scientific one was significant. At frequent intervals Ford Hungary surveyed the rates paid by other western employers in Hungary. The information was used to put the wages on a scale from the lowest to the highest to identify the 66th percentile which Ford used to decide the salaries it would pay. In addition individual's pay also depended on their experience and performance. Individual workers performance was judged by peers within the subgroups using criteria of problem-solving, production and communication skills. Product management evaluated the performance of the sub-teams. Based on this information management generated a performance ranking which workers could comment upon. The final ranking was used to determine the individual pay increase. The result was that every worker's pay increased to a different extent in the annual rise. In this way management created a payment system which rewarded performance but which was based ultimately on forces beyond the

control of management and workers; namely the rates of pay paid by other comparable employers elsewhere in the country. The system thus attempted to depoliticise the issue of pay. In doing so the company also successfully de-coupled pay from the rate of inflation. This was particularly significant due to the high rate of inflation in Hungary at the time.

Habituating the workforce to the innovative organisation of labour was not always easy. Resistance was small, turnover was 1.5pc (two workers were fired by management between mid-1992 and mid-1993) and absenteeism 1.8pc (up from under 1pc as the plant started operating), but the approach created problems. Not least workers were able to draw parallels between Ford's philosophy of work and that in soviet industry. Thus Ford rhetoric stressed that the firm was organised in such a way that everyone worked for the good of each other and for the good of society. For some workers this was uncomfortably close to the way ideology was used by soviet managers. For its part, management tried to convince workers that it was only the rhetoric that was similar.

Once the Labour Code was introduced management became concerned that it should not undermine the organisation it had established. Having set up a very complex communication system which concealed the exploitation of work successfully enough for workers to show unexpected levels of initiative and motivation, management feared the antagonistic feeling that establishing a works council might create. Management's reading of the Labour Code was such that it believed it only had to set up a works council if workers asked for it. According to

management they did not. In any case management felt that their factory regimes more than met the spirit of the Labour Code.

In keeping with such a strategy management explained that it would not prevent the establishment of trade union representation in the factory if the workers expressed a wish for it, which they had not. There was some limited evidence however to suggest that two attempts to establish a union in the plant had been tried and failed. Those involved were concerned with the rates of pay. Officials in VASAS resisted attempting to mobilise workers in the plant for fear of finding it difficult and thus leaving the leaders vulnerable to management.

Ford had thus set up a factory regime which appeared to be very successful at concealing antagonistic relations of work and emphasising those which would appear to benefit all. The main device for achieving this was selective informalisation and bureaucratisation in the workplace. Thus the definition of work and the expectations of workers were informalised with the result that there were no established minimum labour standards. Consequently management's expectations of labour and the intensity of work could always be increased in the absence of prejudged criteria. In addition, other factors, particularly the issue of pay, were unduly bureaucratised as a means of securing greater control over a potentially antagonistic concern. The subcontracting of non-core labour, caterers and security guards neatly illustrated this and served to divide workers (on very different rates of pay and conditions) on the same site. However, in other matters, for example communication, a combination of formal and informal procedures was employed. In addition, philosophy and ideology

were central in establishing the conditions of management control and in articulating that control itself. Thus through a particular rhetorical device - 'we won't tell you what to do other than you must make a profit' - a western investor successfully secured the consent of workers, without authoritarian discipline, by forcing them to conceal (through internalisation) their own exploitation of themselves. The contrast with Suzuki's authoritarian approach and the resistance it generated was striking. The soviet ideology had gone but ideology remained a crucial weapon at the workplace. Indeed a crude version was replaced by one far more subtle and believable and potentially successful. Crucially, the conditions of transformation permitted and assisted the generation of such forms of control. Workers had no preconceived ideas about working in a capitalist factory and thus had no sense over what was legitimate and what was not. This and the factory regime meant that workers believed management and did as they were told.

Gelenkwellenwerk Mosel (GWM) - GKN

In the late 1970s SAW contracted Citroen to construct a new plant to supply drive shafts for its assembly of the Trabant. Once the THA took over SAW the driveshaft plant was separated from SAZ (as it had then become known) to become an independent company called Gelenkwellenwerk Mosel (GWM). The new management came from SAZ and was charged with setting up a bureaucracy and taking over the workers' contracts and updating them in the light of West German labour legislation. In January 1991 (after just three months) GKN purchased the company from THA and leased the site from SAZ. Thus, in contrast to Ford, GKN took over a going concern which had been partly transformed.

The plant had previously exported products to both western and eastern Europe but GKN found the plant inefficient, in part because of the way it had been separated from SAZ. Thus unlike Ford which enjoyed a *tabula rasa*, GKN embarked on the task of genuinely transforming work within the same factory by first undoing the legacy bequeathed by the soviet system. GKN set about reducing the workforce from 1,335 at the time of its take over to 500 at the end of 1994. Crucially for GKN the reduction of the workforce had been begun by THA whilst it was the owner which legitimised and justified the need to cuts jobs. In addition, at the time the THA sold the plant to GKN it had not begun to demand employment guarantees. The redundancies took place in three phases, each one accompanied by a social plan and severance payment system agreed to by the works council which had been established in the plant with the formation of GWM. The first phase of redundancies, totalling 465, took place between January 1991 and early 1992. The second phase took place later with the closure of the forge with the loss of 250 jobs, taking employment to 610. The third phase involved the loss of 110 jobs between mid-1992 and the end of 1993.

The management and works council agreed to use a points system in order to identify which workers would be retained by the company. Thus each worker's circumstances were evaluated (length of service, age, family responsibilities, likelihood of finding alternative employment) and those with the most points were the most secure. This resulted in an increase in the average age of the workers to 35 and raised the proportion of employees with family commitments who had more to lose

than most should they have lost their jobs. The system not only enforced a degree of social concern on the part of the company but also helped to turn the process into a technical exercise devoid of political or personal consideration. Thus creating a technical procedure contributed to establishing and co-ordinating management and workers' interests. It was significant that the management of the plant continued to be dominated by the GWM management previously employed by SAW, who clearly continued to feel responsible for the workers since they were reluctant to make people redundant. One outcome was the unwillingness of management to make high skilled and high status engineer/maintenance workers redundant. Despite this procedure works council representatives complained that in practice in certain parts of the plant supervisors and foremen were able arbitrarily to select the poorest performers for redundancy. This illustrated the poor bargaining position of the works council. In addition, the works council agreed to a redundancy payment scheme which the management considered to be cheaper than expected.

This reflected the inability of the works council to identify and defend workers' interests. The works council effectively conspired with management to reduce the workforce. Thus it did little to assist the few workers who resisted redundancy including one worker who went to court to fight his case. He lost his job. In general the works council was convinced of the need for substantial changes to enable the company to compete in the new market environment. It believed that its best interests were served by enabling management to do everything in its power to keep the company afloat. The continual fear of further job losses and the unspoken

threat of closure, as orders fell, forced the works council into line. The works council was simply unable to articulate a workers' interest.

At the same time as the workforce was more than halved, although turnover fell, output remained fairly stable as labour productivity doubled. This was largely a consequence of technical change, production reorganisation, and new forms of using and allocating labour. The reorganisation of production involved the disintegration of production processes and concentrating machines to reduce the use of space as a means of reducing overheads and improving productivity. The company was divided into three sections: the forge which was closed in early 1993, the machining hall and the assembly hall. The machining hall was dominated by metal forming machines which were linked by chain conveyer systems. Once GKN took over, most of the conveyer belts were removed and work-in-progress was moved from machine to machine in pallets by workers. As a result central control over the machines was removed as the tools became individually operated. Work thus became more labour intensive and the production system more flexible, able to respond to disruptions caused by old and poorly maintained tools. At the same time the tools were moved closer together to reduce the need for operators by increasing the number of machines any one worker could supervise. At the same time to facilitate flexibility of outcome management sought to increase standardisation of production processes and components so that there was as much in common between different parts as possible. In the assembly hall the conveyer systems were also broken up as work stations were reorganised into short circular labour intensive lines or cells. Instead of the work-in-progress moving between the workstations on conveyers the workers moved

between the positions carrying the work with them. The ergonomics of work were also improved by installing cheap simple power-assisted assembly tools. In these ways the reorganisation of technology first altered the mechanisms that were used to control workers. Thus central control by technology was replaced by control by layout.

In addition to the mechanism of physical control over workers GKN established a new hierarchy of responsibility and enforced the intensification of work. As the workforce was refashioned the proportion of skilled maintenance specialists increased. Management enlarged operator jobs to include some maintenance and repair functions. Thus the high status maintenance workers were told to become operators or leave the company. In doing so they were forced to take a pay cut in keeping with the lower skill demanded by the new jobs and lost their status. In this way management effectively broke the power of the core workers in the company. It also ensured a highly qualified and highly skilled group of operators. Having established its power the management was in a position to push through a series of other changes which transformed work. However, it was to some extent constrained by the low capacity utilisation of the plant which not only increased unit labour costs but also restricted management's ability to intensify work.

To intensify work, as we have seen, machine tools were moved closer together to enable workers to operate up to three machines (in contrast to one in the past). Management also made time norms stricter to force the speed of production to increase. As well as enlarging the role of operators and reducing the importance of

maintenance workers, management altered the role of foremen. Whereas before the regime changed the foremen assisted work and were authoritarian in setting targets GKN sought to alter their role into managers using communication skills to create a different atmosphere on the shop floor. In sending these workers to GKN plants in western Germany, management sought to encourage foremen to show greater interest in how workers performed their duties and act as a facilitator for them. In these ways responsibility, or in other words the burden, was devolved and placed on workers and foremen rather than management.

One of the most visible strategies to intensify work was the introduction of cells in the assembly hall. This involved the creation of lines of up to eight workstations in a horseshoe pattern. Each cell did not have a leader but a 'feeder', usually the most skilled worker, responsible for ensuring that all the workstations were supplied with the components to make the driveshaft. To do this the feeder would fetch parts from the machining hall. In this way production was pulled through the production process. The workers stood in the inside of the horseshoe placing them in an extremely intimidating and cramped environment. There were two ways in which the cells operated. Either all the workstations could be occupied by workers and they passed the driveshafts from position to position or the workers walked around the horseshoe carrying and assembling the product as they went. Each cell was not product specific but dedicated to a geographical market area. The number of workers in the cell and the organisation of work varied according to the volume of demand. Management found that it was more efficient for individual workers to assemble the entire product than just a part of the process except for at the highest

volumes when a segmented labour process was more efficient.- In part this was due to the fact that with less than maximum capacity the cell would operate with less workers than there were workstations. The result was that there were always free work positions which contributed to create an atmosphere of haste as the slowest worker was always being followed closely by the fastest. At the same time the introduction of cells was used as a way of establishing a new time system which increased the speed at which workers had to operate. The result was that workers had to work much harder than before, so fast indeed that it was not possible for the workers to talk to each other, and they complained that they felt more exhausted at the end of a day's work than in the past. However, on the other hand the workers also expressed their view that although work was harder it was also more enjoyable and provided a greater degree of professional challenge.

The use of the cell system underlined one of the most important elements of the new factory regime. That was to place workers under stress and pressure to force them to find more efficient ways of doing things. Thus as important as reorganising production and labour was the creation of a work culture in the plant which facilitated change. Management divided the firms into three profit centres which were judged according to input, throughput and output. This created a competitive environment in which the three centres acted like mini-businesses within factory. It was designed to encourage initiative but was found also to undermined co-operation between different parts of the plant. Thus management had to establish mechanisms for co-operation and competition. As a result the management introduced a more communicative system to try to make workers feel part of the company and its success. One result of

this was that workers were impressed that the new management was open and concerned about the welfare of the workers. Communication was also designed to foster problem-solving skills with the result that a programme of item specific workshops was introduced as a way of breaking down barriers. The purpose was to make workers identify the links between their own individual performance and the success of the company overall. One of the ways management attempted to do this was to introduce a large performance related element to the pay system. Thus the maximum performance-related bonus could be 130pc of the standard wage. Management intended that increased communication and the enhanced willingness of workers to want to solve problems would create an environment in which team working would develop almost incrementally from below as networks between workers emerged.

Whereas the works council basically supported management's alterations to production and accepted its view that job losses were necessary, wage levels were a point of dispute. Underlying the dispute was the allocation of workers into wage groups by the management that was installed when the THA separated GWM from the rest of SAW. Although they were in control for only a few months prior to GKN's take over, they applied west German labour law to the plant. Most significantly they placed GWM's workers in wage groups six to ten, somewhat above the average in other local firms. This meant that GKN paid the highest wages amongst auto component producers in the local area. The result was that GKN management prevented workers from moving up to higher wage groups and actually tried to persuade the works council to agree to pay cuts. In doing so management raised the

prospect of not only further job losses but also the possibility that GKN could divest itself of the plant[23].

Thus management continued the slow transformation of work by instilling in the workers the need to work harder and more flexibly for the same or preferably less pay than before. The works council was initially unwilling or unable to challenge management but as time passed the council became more confident, especially after the strikes of spring 1993 which seemed to engender a new spirit of collective consciousness in the plant which was harnessed better to defend workers interests. During the course of the strike there were only five workers who continued to report for work.

6.4 The transformation of work: workplace change in indigenous automotive enterprises

Having examined in detail the transformation of work at four locations of direct foreign automotive investment this section considers the two most important indigenous auto firms in Hungary and east Germany (see chapter 4). In looking at first IKARUS, and second Sachsenring, we examine the extent to which it was possible to transform work in the absence of significant foreign investment. In doing so, it becomes clear that social relations of production within the workplace were only partially transformed, and even then at some cost to the firm's viability.

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[23] In connection with this threat two points were significant. First, being one of the first companies to purchase a manufacturing company from THA, GKN did not have to sign enforceable employment and investment commitments and as a result did not face financial penalties for divestment. Second, by the end of 1993 capital investment in the plant by GKN had been only DM3 million despite its public pledge to invest DM60 million. In consequence, the costs to GKN of divesting itself from GWM would be very small.

6.4.1 IKARUS

The transformation of work at Hungary's best known and largest manufacturing enterprise took place amid perpetual financial crisis and uncertainty over the company's future ownership. Under such circumstances sheer survival was the first priority and the need to transform work was a secondary issue. Indeed it was significant that amongst IKARUS's senior management survival was seen in the context of the company's relationship to the Hungarian state and its traditional customers in the former Soviet Union. As a result the restructuring that occurred in the company was, at least initially, defensive - designed to preserve as much of the existing business relationships as possible - rather than part of a genuine attempt to restructure its operations in response to change in the economic system. Thus in response to the Soviet Union's inability to finance its bus orders first IKARUS and the Hungarian state permitted Soviet equity investment and later, once Mercedes Benz had decided not to enter into a joint venture, supported the establishment of small assembly facilities in five cities across the former Soviet Union as a means of enabling its existing customers to continue ordering. At the same time the state continued to subsidise the company. Thus the context surrounding the change in work place relations was the preservation of relationships with the major customer and the state dating from the era of state planning which were designed to reduce the need for change. The submission of the company to the law of value was postponed.

The transformation of work comprised three factors: the contraction of the workforce and the reduction of production, the partial and selective intensification of

work, and the reform of the industrial relations system at the plant. On the shop floor changing conditions centred on mass redundancies and an even greater reduction of production volumes. The first stage in the unwinding of the commercial vehicles production system actually involved an increase in IKARUS's workforce from 8,000 to 9,100 in 1991 as the state compelled the bus maker to take over a plant which it did not want from Csepel Auto (the chassis supplier). Thereafter the workforce began to fall, at first gradually to 8,600 in 1992 and then more rapidly to 6,600 in 1993. Thus the size of the workforce fell by around 25pc between 1991 and 1993. However, redundancies did not keep pace with the decline in production. Between 1989 and 1993 production fell 75pc, from 10,000 units in 1989 (production had peaked at 14,000) to 5,000 in 1991 and again to 3,500 in 1993. The first substantial wave of redundancies was announced in the second half of 1992 when 2,000 job losses were announced. It was not insignificant that management had initially wished to make 3,000 people redundant. Those made forcibly redundant were offered severance payments worth between six and 12 month's pay depending on the worker's length of service. In addition, men over the age of 58 and women workers aged 53 or more were forcibly retired. The job losses were particularly concentrated at the headquarters plant in Budapest. Thus after this round of redundancies employment at IKARUS's five main plants was: 1,600 at Budapest assembling 500 coaches, 3,200 at Székesfehévár assembling up to 3,000 buses, 1,000 at Mor producing seats, wiring harnesses and other components, 500 at Kiskunhalas producing steel parts, and 300 at a plant in Szeged producing doors.

The loss of market and job cuts forced the company to reorganise the production process. In the first instance the production of town buses was stopped at the headquarters plant in Budapest and concentrated at the Székesfehévár plant. At the same time the production of touring coaches was located entirely in Budapest. IKARUS also made its largest component plant (IMAG, located in Mór) increasingly independent, turning it into a company limited by shares owned by IKARUS and the state. Underlying the strategy was IKARUS's wish to transfer ownership and responsibility of IMAG to the state so that it could concentrate on assembly and externalise component production. However, at the same time there were some contrary developments which suggested that the company was not so much intent on disintegration as on protecting its core workforce. Most significant was IKARUS's decision to stop sourcing the chassis from Csepel Auto and to source inhouse. This provided work for its employees and reduced the number of necessary redundancies. Thus the reorganisation of the production process was in part governed by the continuing feeling amongst management that it should protect workers from the consequences of the market. The internalisation of other smaller parts of the production process resulted in an increase in vertical integration from between 15 and 20pc (depending on the model) to around 40pc. At the same time management sought to diversify, into special commercial vehicles for example, as another way of sustaining development.

The second major change to the production process concerned final assembly. IKARUS was alone in the global bus industry in having built and operated a moving assembly line. However, with the reduction in the volume of production the assembly

line became a hindrance and was abandoned in favour of a dock-based process. As a result, to prevent bottlenecks in the production process, in certain parts of the plants the pace of work had to be reduced. In addition, the low volume of orders, and the uncertainty that surrounded their financing, resulted in an unevenness of work. Thus workers would lie idle for weeks at a time waiting for an order to be secured and then sometimes would have to meet it rapidly. The interruptions to work rendered scheduling difficult and undermined discipline on the production floor. As a consequence management argued that quality actually fell and that it proved harder to tell workers what to do and ensure that they met quantity targets. The effect of the break-up of the assembly line was to reduce the control enforced by the production process just when management needed to secure greater control over the labour process.

Despite this, management sought to introduce mechanisms to enable it to secure greater control over the labour process and change workers' attitudes towards their work. The threat of redundancy had a bigger effect on workers than any management strategies. Unskilled workers feared most for their jobs with the result that they, amongst all the workers, were most enthusiastic in responding to management. In contrast, the skilled workers struggled with management, not least because they sought to preserve their privileges dating from the old system. As a consequence management used the redundancies to try to remove some of these workers rather than the unskilled. Thus management sought to gain control over the production floor by removing and undermining the power of key skilled workers. At the same time a retraining programme was introduced. The purpose of the programme

was to encourage workers to take more care over their work. In particular the training focused upon quality control and formed part of a long term strategy to introduce Total Quality Management (TQM). Initially quality control personnel were retrained and the long term aim was to retrain every employee. At the same time, funded by the Ministry of Trade and Industry, IKARUS employed consultants to draw up plans to satisfy ISO 9000 series certification. Once again management sought to use the pretext of improving quality as a way of securing and controlling greater effort from workers. Integral to this strategy was a plan to upgrade the company's technology to improve efficiency by importing computer controlled processes. However, in practice a great deal remained to be done not least; management recognised that it would not be able to extract greater effort from the workers whilst the real value of pay remained in decline.

Whilst management struggled to transform work in the two large assembly factories it enjoyed more success elsewhere. Like some other Hungarian engineering enterprises, in the 1970s IKARUS established a small factory to try to break into western markets. The plant, also located in Budapest, had a capacity of around 100 units annually and was organised in a completely different manner than the plants supplying the Soviet market. Since it competed at world prices the Special Coach Factory customised models, by including imported components such as engines, to meet the customer's requirements. In the early 1990s the factory was turned into a joint venture and concentrated on assembling top quality vehicles made mostly from foreign components. At the same time work in the plant was intensified and workers were paid higher wages in recompense.

In addition, IKARUS negotiated, after one failed attempt in 1991, to establish a production line to supply Suzuki with small pressed parts. It intended to organise the activity into a separate company within IKARUS in which it was hoped Suzuki would take an equity stake in order to turn it into a joint venture. Whereas the contract was designed to utilise some of IKARUS's huge excess press capacity, more significantly management saw it as an opportunity to introduce Japanese working conditions into the factory. IKARUS's subsidiary IMAG had already used a similar strategy of transforming work in self-contained parts of the site - either joint ventures or lines producing components for foreign customers - as a means of gradually modernising the entire company. Within these transformed 'islands', work was intensified and speeded-up, and workers were more highly disciplined and better paid.

The third element of the transformation of work at IKARUS centred on labour relations and the representation of workers. In the course of the company's crisis the relationship between management and the workers deteriorated severely. This began in January 1990 when workers were first laid off as production was halted because of the government's refusal to continue to allow shipments of buses to insolvent customers in the Soviet Union. In consequence workers staged a demonstration outside the Hungarian parliament against the government's desertion of an enterprise it had created. In addition to the grievance with the state there were two main concerns with enterprise management. First, management rewards increased at a time when the workers' average pay failed to keep pace with increases in inflation. This led to speculation that management was pursuing the privatisation of the enterprise - which in

the workers' mind was associated with redundancies - because it stood to benefit personally from any sale. The debate focused on the issue of who owned the company and therefore who could make the decisions surrounding any sale and who stood to benefit from the proceeds[24]. Thus the workers tended to see management as stealing property owned by them all and then selling it. The second, and related issue, was that the powerful cohort of skilled workers did not trust management's ability to manage the company's crisis. Not least workers believed they were not being kept fully informed about the company's position and future prospects. As a result communication between management and the workers broke down and a series of symbolic one and two hour strikes was held.

This was in part because of the unstable institutional framework for representing labour since labour law had not been reformed in the light of political changes (see chapter 4). This meant that IKARUS's management dealt with nine different trade union bodies which collectively represented 60pc of the workforce. Without a permanent structure *ad hoc* ephemeral bodies were created to manage relations with the unions. At the same time many of the unions were in competition for members which meant that management was not dealing with a unified force. The introduction of the Labour Code in mid-1992 established an institutional framework and eased the uncertainty. The rule that only trade unions with 10pc or more of the workforce as members had consultation rights cut the number of unions management regularly dealt with to just two: VASAS (the metal workers' union dating from the soviet system) and a smaller local or company union called the Council of Workers.

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[24] In addition to the debate between workers and management over who was the real owner of the company, local and central government and the company itself all disagreed over the precise ownership details.

Also following the Labour Code, a collective agreement was made between the workers and management. The agreement was signed by all nine trade unions with members in the factory but only offered full negotiating rights (over wages, social welfare and pay awards) to the largest two unions. The collective agreement covered recruitment, employment contracts, redundancy and disciplinary procedures. In most cases the unions secured agreement from management which was some way above the legal minimum. Thus whereas statutory severance pay was six months' wages, IKARUS offered to pay 12 months' worth of wages. In addition, IKARUS agreed to continue a tranche of social support above the statutory minimum. The company continued to subsidise catering in the plant and contribute towards the cost of workers purchasing their own flats. The company also maintained its tradition of providing workers with clothes, and operating holiday resorts and nursery schools. The collective agreement did not include a factory-wide pay agreement since different grades had their own employment contracts. Despite this the main union in the factory, VASAS, was satisfied that the company paid above the national average and in line with what could be afforded. The final element of the new labour relations structure in IKARUS involved the election of a works council which was dominated by VASAS but whose influence remained to be seen.

In general, despite the symbolic strikes which centred on privatisation, IKARUS's workers were relatively docile. In particular there was very little resistance to the loss of jobs but this was in large part because management had yet to force through the dramatic restructuring the company required in order to compete in the

new market environment. This explains the lack of worker resistance; management had yet to confront them and indeed persisted with strategies designed to postpone radical change. However, after the company had decided to establish a series of small bus assembly plants in the former Soviet Union, concern was expressed that it would effectively lead to the exportation of Hungarian jobs. This perhaps better than anything else indicated the extent to which the old style of thinking (by management, labour and the state) continued albeit in combination with concerns more usually associated with capitalist economies. For it showed that efforts to protect IKARUS from the vagaries of the market (because of its inability to transform the social relations of production) required it to relocate part of the production process to locations where the law of value remained absent. In this sense IKARUS's 'spatial fix' involved escaping the market. In doing so it illustrated the extent to which the company remained untransformed, persisting with strategies designed to insulate it from the discipline of the law of value. Not least this was because of an inability to secure greater control over the labour process in the face of an inability to find the capital needed to restructure the company.

6.4.2 Sachsenring Automobilwerke Zwickau GmbH[25]

On 3rd April 1991 the last Trabant came off the assembly line at IFA-PKW Sachsenring Automobilwerke (SAW) in Zwickau. Shortly afterwards the remainder of SAW (VW and GKN having already purchased some of its most valuable assets) was transformed into Sachsenring Automobilwerke Zwickau GmbH (SAZ), a 100pc-owned subsidiary of the THA. The THA's Direktorat Fahrzeugbau then

[25] I am indebted to Nick Marshall for making a transcript of an interview with a SAZ works council representative on 15th November 1993 available to me..

embarked on attempting to turn the former auto maker into a 'service enterprise' for the industry based on four cost centres (THA 1992, see also chapter 5).[26] By the end of 1993 about a half of SAW's former site had been either sold or leased to around 19 newly created companies employing 3,500 people[27].

In the course of these changes, work was not so much transformed as undermined. Workplace relations focused on three important factors: first, employment levels, as rounds of mass redundancies were announced and implemented; second, the privatisation of portions of the company's assets and the break up of the workforce; and third, the investment by VW in Mosel. Employment at SAW's four sites in and around Zwickau fell gradually from a peak of 11,500 in the late 1980s to 8,000 in April 1991. Following the creation of SAZ the size of the workforce fell much more rapidly. In the course of nine months between April 1991 and January 1992 around 6,500 jobs were lost as the workforce shrank to just 1,500. Thereafter the size of the workforce remained stable until the end of 1993. This was possible because VW sourced the bodies for the Golf II from SAW before transferring them for final trim and assembly at Mosel I.

At the same time as the redundancies were being implemented, sizeable parts of SAZ were hived off and sold to investors. The overall effect of the substitution of a

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[26] At the end of 1993 SAZ was liquidated and a new 'empty shell' company was established in part of the former site employing 280 people.

[27] This figure is an estimate. It was significant that owing to the manner in which the THA privatised state owned assets and extracted employment and investment pledges from investors it was able to point to the *potential* of these firms to employ 5,800 workers and to conceal actual employment levels (see Chapter 4). In addition, even though the THA presented the establishment of these new companies as absorbing labour from SAW, not all those who found work were former SAW workers.

social division of labour for a technical one (see Sayer and Walker 1992) was to break up a workforce which had been talked about in terms of a 'family'. Thus solidarity amongst workers was broken down as the interests of workers in newly established firms and those at SAZ differed. Moreover the contrast between working in new modern 'foreign' firms and a declining SAZ served to discipline workers in both. The largest privatisation of part of SAW was, of course, VW's (with the THA) take over of its most modern site to the north of Zwickau at Mosel. The result of this was to link the future of VW's investment in Saxony with that of SAZ. Hence VW used SAZ as a temporary body shop. However, once production of the Golf II was replaced by Golf III and the body shop had been built at Mosel II, SAZ lost this business. As a result although SAZ's workforce remained around 1,500, in practice more and more workers were placed on short time working as the future of the company was established. In the course of this period the reliance on VW, which had been universally seen as SAZ's salvation, came to be seen as a problem contributing to the company's crisis.

The significance of the case of Sachsenring lay in the failure to transform and intensify work because the social relations dating from the soviet regime remained largely intact in the form of a commitment to place. The state, primarily in the form of the THA, was unable and unwilling to break-up the entrenched interests in the work*place* whose resistance, in the form of a coalition between management and labour resulted in a notable victory over capital (as reflected in state policies). However the coalition of management, labour and local state officials bound together in a web of non-capitalist social relations could not prevent the liquidation of their company.

As the former producer of the Trabant, SAZ was an extremely symbolic, visible and politically significant company before and after unification. The legacy of the SED regime bequeathed a powerful institution with which both management and workers identified. In large part this was because of the important role that Zwickau had played in the development of the automobile industry in continental Europe prior to the partition of Germany. Crucially, then the locality's links with the auto industry predated the Soviet regime and the Trabant. In part this explained why helping to build the Trabant conferred privileges, such as pay levels 20pc above the average, and contributed to the creation of a strong-willed workforce with a collective identification. Although this identification was in the enterprise rather than a workers interest, the crucial point is that even though it was state owned, SAW had an identity that was distinct from the state in general. Thus the historical links of the local area with the automotive industry, the symbolic, political and economic significance of the company in conjunction with the dependence of the local economy on SAZ, generated a real commitment to place which was embodied in the firm. This all served to underline the sensitivity that surrounded the company's future and helped to explain why entrenched interests proved so resistant to change.

The visibility of the company led to a series of high profile visits by government and trade union officials, including one by the German Federal President, and resulted in much attention being paid to the privatisation of SAZ. In these circumstances the THA, which became the owner once the IFA was liquidated, was unable or unwilling to exercise its normal level of control. Whereas elsewhere the THA sought to

eliminate or marginalise supervisory boards, in the case of SAZ it was unable to do so. The supervisory board at SAZ contained a number of prominent individuals who represented powerful interests, including IG Metall, and local and regional government. This meant that interests other than the purely financial - as embodied in the THA - were represented including a 'local interest'. It meant also that the THA did not have unfettered proprietorial rights. One other difference between SAZ and other firms is that whereas the THA usually replaced top managers with west German managers or promoted junior managers, in the case of SAZ the management from the SED regime was left largely intact. Only one senior western manager was implanted but as far as the THA was concerned he 'went native'. The result of this continuity was the preservation of soviet-style management and the maintenance of a corporate interest.

In the same way as management interest remained intact in the course of unification (despite institutional change) the labour interest was largely untransformed. Whilst SAW was part of the IFA Kombinat the workforce was organised into departments comprising 150 workers who elected up to five shop stewards each. The stewards, despite being able to raise individual issues of concern to workers, essentially worked in tandem with the supervisors in scheduling production and overtime. This meant that in effect the shop stewards, intimidated by the supervisors, were part of the disciplinary system that was employed in SAW. The shop stewards collectively elected representatives to sit on SAW's company trade union committee or *Betriebsgewerkschaftleitung* (BGL)[28]. Nominally, the BGL institutionalised worker

[28] The BGL was the executive of the Betriebgewerksorganisation (BGO).

self-management of the firm but in practice had little more than a symbolic or dignified role which involved conferring privileges as a means of securing workers' consent and managing SAW's schools and holiday accommodation.

However, crucially this system of labour representation did not work well in SAW. In particular, it proved difficult to persuade workers to stand for election as either shop stewards or BGL representatives (in part because it involved a reduction in pay). However, more significantly the reluctance of the workers to participate in the labour structures illustrated their resistance to the bodies which were supposed to represent labour. The fact that the BGL could not be distinguished from the SED meant that labour representatives were politically vulnerable because they were effectively the mouthpiece of management. This meant that labour representatives were squeezed between management and supervisors on the one side and disgruntled workers, whose representatives did not represent them, on the other. An antagonistic relationship existed between workers and managers (which was also indicated by absenteeism) which was not institutionalised and therefore articulated and thus the management was unable to incorporate and eliminate worker interest. The result was that a tradition of worker militancy survived the SED regime.

In 1990 IFA, the holding company that owned SAW, transformed the system of labour representation to reflect West German law. The BGL was replaced by a works council in early 1991. However, the personnel remained similar. As a result the old leader of the BGL, with a close relationship to management, was elected the leader of the works council (Jürgens *et al.*, 1993)[29]. At the time, SAW employed 8,000

workers which under labour law permitted a council consisting of 39 representatives of which seven were released from their jobs to concentrate full-time on the council's business. Thus a powerful institutional basis was created for representing labour interest which untapped the latent resistance that already existed in the company. Considerable levels of interest were shown by workers in the establishment of the council. At the same time IG Metall established a powerful presence in the firm by recruiting the majority of the workforce as members and through the establishment of a group of shop stewards. The relationship between the works council and IG Metall developed closely with many of the works council representatives also IGM shop stewards. With union support the works council was powerful and successful in establishing a close and, significantly, a co-operative relationship with management. Indeed the preservation of the existing management resulted in no attempt being made to prevent the development of a powerful political consciousness amongst the workers.

Thus although the institutions of labour representation were reformed in many respects, the changes merely permitted articulation of a labour interest which dated from the state planning regime. As a result the new social basis of the firm acted to incorporate the workers' interest and disperse workers' resistance. In short workers were given cause to identify in SAZ, as it had by then become, in ways which had simmered under the surface during the era of the GDR. Thus paradoxically the freedom to organise permitted workers to express the long-held identification in the firm above an interest which could be identified as the workers. The change in the institutional basis of the enterprise actually convinced workers that the firm could be

[29] Jürgens et al., do not refer to SAZ by name but refer to it as plant b.

run in their interests. The ideological promise held out in the course of the SED regime had become a genuine possibility upon its demise.

The result of these changes was a coalition between the supervisory board, management and labour which undermined the THA's attempts to transform the company. The most visible form of resistance centred on the establishment of an agency to absorb redundancies, which culminated in a sit-in by 1,000 workers in 1991 and management's refusal to accept THA's directives. With the announcement that the state would no longer subsidise production of the Trabant considerable concern was generated by the prospect of thousands of redundancies. IG Metall's deputy president visited SAZ on 3rd April 1991 to witness the last Trabant come off the assembly line and to lend his support to workers who were demanding measures to limit redundancies. At the same time IG Metall suggested the establishment of a 'qualification' or training company to retrain those made unemployed. With representatives on the company's supervisory board, IG Metall introduced the idea to management. This followed the use of similar companies in the Ruhr in west Germany in the early 1980s to manage waves of redundancies in the steel industry.

Later that month, SAZ workers staged a series of demonstrations during a visit by the German President to the company. In response the President agreed to support the foundation of a qualification company. However, despite the weight of opinion the director of the THA, Brigit Breuel, indicated its opposition to the strategy. As a result the THA forbade the management, who supported the idea, from using any of its premises - owned by the THA - for the company. In response to the THA's refusal to

support the plan the workers staged a sit-in of the factory. In the course of the sit-in the supervisory board ignored the view of the nominal owner - the THA - and agreed to the establishment of Sächsische Aufbau- und Qualifizierungsgesellschaft Zwickau (SAQ) as a 100pc owned subsidiary of SAZ. Following its establishment the THA changed its mind and agreed to finance SAQ initially until the end of 1992 (subsequently extended into 1993).

The purpose of the SAQ was to provide one or two-year training and work opportunities for up to 4,000 workers made redundant by SAZ under the ABM scheme. By the middle of 1993 some 2,000 SAZ workers had attended retraining courses and the company had begun to tender for external training contracts, including VW Sachsen. The establishment of SAQ was presented as a victory for the workers despite their having failed to prevent SAZ from making thousands redundant, which was the real issue. Instead of securing jobs SAZ workers secured training with little expectation of employment thereafter. Moreover, the establishment of the company made it easier for SAZ to push through redundancies and undermined initial demands that the redundancies themselves be prevented. In this sense, whereas the industrial action had demonstrated the power of the workers and forced the THA to alter its view, it contributed to little more than a visible political gesture. The creation of an alternative, other than unemployment, made it easier for the works councils to support management implemented redundancies. Seen in this light the SAQ should have permitted greater transformation than had occurred earlier.

However, in spite of the establishment of the SAQ events conspired to prevent the transformation of the social relations of production in the firm. This was for three main reasons: the coalition of interest between management and labour, the non-market relationship between SAZ and VW, and finally, the failure to intensify work.

Firstly, the struggle to set up the qualification company, although it did not prevent redundancies, cemented a coalition of interest between the supervisory board, the management and the works council against the THA concerning the future of the company. As time went by without a serious offer for the whole firm by an investor the THA decided that the only way of securing a future for SAZ lay in breaking up the company. The THA sent in a team of 40 management consultants to identify viable - but not necessarily going-concern - businesses within SAZ which could be hived off and sold independently to investors. The result was the identification of nine different profit centres which could be privatised separately. However, the supervisory board, management and the works council wanted to prevent SAZ from being broken up more than it already had been. To achieve this the management, backed by the works council, tried to arrange a management buy out (MBO), supported by Deutsche Bank, but negotiations with the THA came to nothing. The business plan that was drawn up, however, indicated the extent to which management retained the old style of thinking that accompanied the planning system in which work could be 'found' to be done. Thus the plan envisaged that SAZ could become a supplier to major German and European car assemblers but did not demonstrate its ability to do so. Despite the failure of the MBO the management and the works council continued to argue that all

the profit centres should be privatised together. In these ways they were able to obstruct the THA's plans and the work of the management consultants.

Second, the nature of the relationship between SAZ and VW served to prolong those attitudes associated with the state planning system and therefore acted to prevent the transformation of the social relations of work. The manner in which the West German state and VW conspired to maintain car production in Zwickau both depended upon and undermined the ability of SAZ to transform itself by introducing the law of value. The establishment by VW of a temporary ckd operation was as much symbolic as a genuine attempt at establishing a profitable commercial enterprise in the short term. Given the size and tooling of Mosel I, VW was forced to outsource body fabrication. Since VW's plants were operating at full capacity as a result of the post-monetary union consumer boom, it sought to source bodies from SAZ. In the absence of any alternative SAZ had little choice but to become involved in VW's short term plans. In order to meet VW requirements the THA sanctioned capital investment of DM70million by SAZ.

However, the relations between the two companies were not strictly commercial. Thus VW in effect 'put out' work to SAZ as a means of giving it work which established a relationship that was not disciplined by the law of value. The relationship was more political and social rather than financial with the result that there was no incentive nor rationale to intensify work. Thus once the body shop had opened at Mosel II VW no longer required SAZ. Likewise when VW began to suffer from the recession in the German car market the volume of parts sourced from SAZ declined.

In the meantime the work was not according to a contract in the typical sense of the term but was much more akin to a planning system: namely work was centrally distributed to keep people busy. The result was to perpetuate modes of thinking that were bequeathed by the planning system. Moreover these circumstances allowed VW to use the run down of SAZ as a resource from which to enhance the viability, and crucially the visibility and thus the social and political value, of both the ckd operation and the construction of the new plant which secured such favourable state backing. At the same time the presence of VW in the area meant that there was always the prospect of VW potentially becoming more involved in SAZ. This not only dissuaded other potential investors but also created a 'wait and see' dependency environment which postponed restructuring. This helped to cement the view, which was prevalent amongst the dynamics of unification and the transformation of the ex-GDR, that restructuring had to be imposed from outside rather than generated from internal resources. Thus the success of VW's project in Saxony, with all the political ramifications surrounding it, in part depended on the conditions which contributed to the failure to transform SAZ by submitting it to the law of value.

These two factors contrived to prevent the intensification of work and the transformation of the social relations of work. In short the massive reduction in the amount of work carried out by the firm made it very difficult to increase labour productivity. At the time the THA took over SAW, turnover per employee was just DM50,000, compared to DM300,000 that was regarded by it as viable. By the middle of 1993 the figure was still well below DM200,000. These figures showed that it proved difficult to maintain exiting levels of efficiency, let alone improve them, whilst

the firm severely contracted. Costs per unit increased substantially, not least because the proportion of overheads in the total costs rose but also because of the vast under-utilisation of capital. Moreover reduced production volumes enforced changes in the organisation of work with the result that labour utilisation fell. Thus many of the body components that continued to be supplied to VW were produced in very low volumes enforcing manual processes. Indeed the variety of the parts manufactured was such that production was craft-like. With increasing numbers of employees placed on short time working it proved harder and harder to maintain discipline, both that enforced by the production process, and that instilled by the labour process. The overall effect was that even those workers who were still employed by SAZ had very little work to do and the work that they did do was not efficient.

Thus the existing interests in the firm and the business environment contributed to *insulate* SAZ from the market and prevented the transformation of work by obstructing and delaying the THA's plans for the firm. However the coalition between the management and workers was crucially unable to pursue alternatives strategies to ensure the company's future viability. As a consequence the firm's crisis continued and both management and the works council were seen as increasingly impotent in the face of the firm's problems. Indeed gradually the coalition lost its influence. In the course of 1992 and 1993 the company was effectively hollowed out as the workforce was cut through redundancies and the privatisation of parts of the firm. As the size of the company decreased so the labour law forced a corresponding reduction in the size of the works council.

With the company in a state of limbo in early 1993 the THA transferred responsibility for the company from the Direktorat Fahrzeugbau, responsible for privatisation, to the Abwicklung department responsible for liquidating the firm. In the course of this period the power of management and the works council continued to wane, as they were unable to suggest any alternative. Thus through time the THA had subtly undermined the coalition of interests but at the cost of effectively managing the closure of the company. Finally, in the middle of 1993 the management agreed to the break up of the company but by this time SAZ was effectively bankrupt. The result was the creation of an 'empty shell' firm utilising part of the SAZ site.

In the case of SAZ the west German state, in the guise of the THA, was unable to reform or by-pass entrenched existing interests and transform the company, only succeeding ultimately in closing the company. Transformation was not possible because broader interests, of the workers and the local area, were projected on to SAZ. The prolonged undermining of the company served a wider purpose for capital and the state, which together stood to gain most from the transformation in the ex-GDR. However, the inability and unwillingness to transform work in SAZ reflected the endurance of social relations embodied in a commitment to a place and to a firm. Thus the non-capitalist social relations in SAZ proved unreformable without the wholesale break-up of the firm itself. The lesson to be drawn from this example was that transformation depended on a new social division of labour as SAW was split up between corporate boundaries (see Figure 5.2). In other words it was the change of ownership, as facilities were bought by companies such as VW, Siemens, and GKN, which brought about transformation. However, this was only the case because of the

way unification and transformation was conceived by the west German state at the national level; SAW/SAZ was never given the necessary tools which could have permitted *in situ* transformation.

In addition, SAZ also highlighted the contradictory nature of the transformation process itself. Not least it indicated that the conditions that were brought about by the introduction of the law of value to the former GDR undermined the potential for SAZ as an individual producer to transform its social relations of work. In the same way that state enterprises under the soviet regime suffered from inertia, so too this continued in the new situation. Also the debate over SAZ illustrated the difference between the local and the national interest and how this gulf was managed by different arms of the state.

6.5 Conclusions

This chapter then, has sought to examine to what extent and how work was transformed in automotive enterprises, and the sorts of resistance that this provoked. The legacy of the soviet system was a chaotic labour process which permitted core workers a high level of influence because supervisors and managers needed to secure their consent in order to overcome production irregularities. As a result following the disintegration of the soviet system, indigenous auto firms introduced strategies which centred on securing greater control over the labour process and the intensification of work as a way of reforming the social basis of production. This involved defining the roles of management and employees and in establishing vehicles for managing sectional interests.

At the same time foreign automotive firms used their investments to experiment with forms of labour organisation which were not only new to the host countries but also largely new to the automotive industry in general. Crucially, the dynamics underpinning the socio-economic transformations created conditions somewhat akin to the 'greening' of 'brownfield' sites[30], in which foreign companies could establish new regimes of work which involved securing, by authoritarian (Magyar Suzuki) or subtler means (VW and Ford), greater control over workers. In doing so the significance attached by management to devices such as quality illustrated the importance of management discourses in controlling work and incorporating and dispersing worker resistance to change. However, whereas auto DFI successfully transformed work, in the indigenous sector transformation was much more partial and uneven. This was particularly evident in the cases of IKARUS and SAZ, where the reliance on foreign (commercial and state) 'expertise', as enshrined in the neo-liberal conception of transition to capitalism, prevented the generation of the conditions of self-transformation.

The principle conclusion from the evidence presented here, in particular demonstrated with regard to VW Sachsen and SAZ but also to a lesser extent by Magyar Suzuki and IKARUS, is that the opportunities for transforming work in one plant depended upon the partial or complete failure of transformation elsewhere. In short, it was industrial stagnation and deindustrialisation which created the conditions that permitted management to secure control over labour. Thus transformation of

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30 I am indebted to Tim Strangleman for this phrase.

work necessarily had to be partial and uneven. The establishment of new regimes of work in foreign owned factories was predicated on their not being a generalised transformation beyond their workplace.

Chapter 7 Conclusions: corporate and territorial-institutional fixes, and the geographically uneven institutionalisation of capitalism.

7.1 Introduction

Change in the west European automotive industry and in east and central Europe (especially after about 1988) contributed dramatically to restructure the geography of automotive production. The uneven combination of these two sets of processes shaped the transformation of the automotive industry in Hungary and east Germany. Marketisation and integration with the global economy emerged from the mutual constitution of corporate fixes for capital and territorial-institutional fixes for societies in east and central Europe. The transformation of the industry in ECE was highly regionally uneven and deeply implicated in the geographically uneven institutionalisation of capitalism.

This concluding chapter begins to draw out the major findings from the evidence presented in this thesis, pointing to the geographically uneven institutionalisation of capitalism. It does so in three interrelated steps which together seek to locate micro (local) changes with macro (supra-local) changes in order to begin to specify the nature of the spatial fix that has been conjured up in east and central Europe since 1989. The first step involves an examination of Hungary and east Germany from the point of view of a corporate fix for auto companies. In doing so it examines, at the micro level, automotive direct foreign investment. The second step involves an investigation of transformation from the point of view of the two case-study countries; namely territories' search for an institutional fix following the disintegration of the soviet system. The third step involves combining the corporate and territorial-institutional fixes, and in doing so identifies some of the points of

theoretical significance that arise from the thesis. In doing so the chapter argues that the spatial fix visited on east and central Europe involved the co-evolution of corporate and territorial-institutional fixes, which produced a spatial configuration of intensified and highly unstable geographical inequalities which equated to the uneven geographical institutionalisation of capitalism. The chapter ends by identifying several issues which emerge from this thesis which warrant further research.

7.2 Step one: Corporate fixes?

Change in east and central Europe opened up a new range of opportunities for automotive firms. As a result a new round of investment by the industry took place in ECE, not least in Hungary and east Germany. Four factors were particularly important in stimulating investment. First, the region provided a low-wage low-cost production location proximate to the EU market. Second, the disintegration of the soviet system and the neo-liberal policies pursued by ECE states (largely imposed by the west) led to a broadly welcoming stance, involving investment incentives, towards foreign investors. This and the post-soviet crisis permitted relatively risk-free low-cost investment opportunities. Third, low levels of car ownership and the diffusion of western consumption norms raised the prospect of ECE in time becoming a large market for cars. Fourth, and arguably most importantly, the disintegration of the soviet system created an environment which permitted investors to experiment with new forms of production.

Auto-related investments in Hungary and east Germany fitted into two coexisting types of corporate strategy: the establishment of regionally integrated

investments such as Suzuki and VW, and functionally integrated 'branch-plant' investments, such as Ford. However, in referring to the strategies two points must be identified. First, different forms of integration coexisted both within enterprises and within countries. This was particularly the case in Hungary, where there was a greater variety of investment strategies than in east Germany. This variety had important implications for regional paths of development. It was largely due to the different legacies of the soviet systems in the two countries and to their very different paths of post-soviet transformation. Second, the two strategies bore a number of important similarities, not least in terms of their likely impacts on regional development. Thus even where there was evidence of regionally integrated investment, the local economic development impacts were relatively insignificant.

The blurring of the distinctions between regional and functionally integrated investments was in large part due to auto firms using their investments in Hungary and east Germany to experiment with and forge new production techniques. The opportunity to experiment depended on the disintegration of the soviet system (which rendered rules, norms and roles uncertain), and crucially, on the dominant path of transformation in which new forms of embedded governance and regulation were not established. The experimental production techniques concentrated firstly on new forms of supply linkage connected with the disintegration of the value-added chain, and secondly on new ways of organising work within plants.

First, the assembly plants that were constructed by Suzuki in Hungary and VW in east Germany had a low level of vertical integration. In consequence their

construction represented a lower commitment of capital and the establishment of fewer value adding processes than in traditional Fordist assembly plants. This allowed assembly firms to minimise investment in capital assets reducing a firms' commitment to place and ensuring continued mobility. It also meant that the links between the assembly plant and the suppliers were significant. There were two important features to the supply relationships that were established in Hungary and east Germany. Assemblers attempted to create a dependent supply base in order to allow them to dictate terms. As a result the networks of key suppliers became 'clan-like' and difficult for other suppliers to penetrate. Such changes were also associated with greater marketisation of relations lower down the supply pyramid. This was significant because smaller investors and indigenous suppliers were pushed down the supply pyramid and became dependent subcontractors producing standardised low value-added parts in competition with many other suppliers in ECE and beyond.

Second, investors sought new means to secure greater control over work. This centred on three important factors. The conditions conjured up by post-soviet transformation enabled investors not only to be highly selective in their recruitment (owing to deindustrialisation and unemployment) but also in establishing new social norms relating to work. Particularly important in this respect was the enduring weakness of trade unions which itself was in part a consequence of concerted efforts by governments. Second, employers introduced new forms of work organisation. This involved the simplification and standardisation of work so that it only required general skills. Also, management introduced new rules of work, particularly concerning team working and quality control, which combined elements of

bureaucratisation (especially connected to quality and remuneration) and informalisation (usually connected to time norms and communication). Third, and connected to the rules of work, management established new and more subtle forms of controlling labour. These centred on management discourses and were designed to foster corporate identification which served to support the rules of work and obscure conflicting interests within the workplace. In doing so the parallels between these management strategies and with the soviet labour process were particularly poignant.

These changes to the supply chain and the nature of work represented the intensification of Fordism or neo-Fordism: division of the production process was deepened and management sought greater control over work. The motivation behind these experiments was to develop new standards of efficiency and new models of production which could be used to force reorganisation at existing plants in western Europe and particularly undermine employee bargaining power.

The experimentation strategies pursued by investors met with mixed success. Those investments which sought to establish regionally integrated investments faced considerably more problems than those investors which embarked on building 'branch plants'. This reflected the boundaries of what was considered possible given the conditions of post-soviet transformation. In short the legacy of the soviet system and the neo-liberal paths of transformation served to preclude that form of economic development. Instead ECE was 'prepared' for investment which was functionally integrated with pan-European production systems.

In Hungary the problems that surrounded the investment by Suzuki, which sought to modernise the indigenous automotive sector and establish a localised production system, illustrated the difficulty associated with trying to restructure production in a rapidly transforming economy and society. In consequence Suzuki altered its strategy away from localisation within Hungary, towards integrating the plant with the European auto industry. In this way the disintegration of the soviet system forced Suzuki to 'Europeanise' the project which involved increasingly regarding Hungary as the location of assembly of parts supplied from Japan, western Europe and only thirdly Hungary. Thus a close examination of the project revealed a low level of genuine localisation and an operation which resembled a branch plant. Likewise VW's investment in east Germany whilst superficially resembling a regionally integrated production system, was little more than an assembly operation shared between its own plant and those of a number of its most favoured traditional suppliers. Such a development was possible because of the conditions conjured up by German unification, namely the cloning and transplantation of a socio-economic formation into the new Länder. VW simply played its part in the process by cloning and transplanting the low value-added elements of the production system, mostly assembly, into Saxony. Therefore, despite the rhetoric, the development more closely resembled a 'branch' plant economy than a localised production system. There was however the possibility that as production volume increased there would be greater local value-added. However, this depended upon market conditions in west Germany and beyond in west Europe and indicated that the region's development depended upon events elsewhere.

Increasingly, the integration of both Hungary and east Germany into the automotive industry involved the establishment of global outposts. As disintegration of the soviet system proceeded, the Hungarian state used market protection measures to force auto firms to invest in the country in return for preferential access to the domestic market. Later the state liberalised the trade and investment regime (as dictated by a neo-liberal agenda) which permitted investors to establish wholly-owned (mostly) greenfield projects rather than joint ventures with local producers. In consequence most investment by-passed the indigenous sector. Also the majority of the investment in the country involved the production of capital and labour intensive components which were supplied to other component producers in west Europe and occasionally directly to car assemblers themselves. Crucially these branch plant investments were isolated from the host region and the domestic supplier industry. Indeed these plants were dependent on being insulated from the environment around them. In consequence the regional development impacts of these projects were limited and arguably even counterproductive. As the 1990s proceeded it seemed increasingly likely that Hungary's integration in the European automotive industry would follow the Portuguese route, specialising in the production of low value added components for car assemblers in north west Europe, rather than the Spanish route, where car assembly and an indigenous market developed.

Investment in east Germany involved the complete integration, not so much of the industry (for that was effectively closed down) as of the region into German production systems. The complete integration of the region was a complex process. On the one hand it involved the location of assembly functions and some associated

investments by suppliers. On the other hand it involved the 'hollowing-out' of a production system through the closure of some elements and the transformation of others into peripheral outposts of west German production systems. As a result there was a delocalisation of production and the creation of a disintegrated production system. Complete integration therefore did not represent the establishment of a greater 'stake' in the European auto industry but rather rendered it more dependent and less able to establish alternative development paths. East Germany thus seemed likely to become an assembly location of parts manufactured either in west Germany (high value-added components) or east and central Europe and especially over the border in the Czech Republic (low value-added parts). Thus the west German state sought to shape development to keep real wages and non-wage labour costs substantially lower than in the west, and to maintain the condition of social fragmentation that allowed the establishment of new methods of production.

Crucially, the forging of new forms of production depended on the conditions that existed beyond the factory gates. The socio-economic fragmentation that accompanied the soviet system (behind the facade) and which persisted after its disintegration, was intensified by the substitution of forced soviet industrialisation for forced dependence on re-industrialisation by foreign investors. The re-industrialisation, such as it was, was 'hollowed-out' and had only minimal local roots. We will investigate this further by examining the territorial-institutional fix that national states sought.

7.3 Step two: Territorial-institutional fixes?

In both Hungary and east Germany the attraction of direct foreign investment was seen as a key component in engineering the 'transition to capitalism'. However, the role that direct foreign investment played in instituting capitalism fell short of expectations for three principal reasons: the legacies of the soviet system, the process of its disintegration, and the neo-liberal paths of transformation pursued by both countries.

First, the legacies of the different ways the soviet system had operated in the two countries were crucial in shaping the impact of direct foreign investment, as exemplified by their automotive industries. Production in Hungary was loosely organised, involving the decentralisation of economic decision making, and relatively low levels of vertical integration. In contrast in East Germany production links were highly rigid, decision making was centralised, and vertical integration was high. This meant there was more 'agency' and greater social fabric (including informal horizontal networks) in Hungarian production systems than in East Germany (where informal networks were weaker and more vertical). As a result the most important legacy of the soviet system was the disembeddedness of social relations; the paucity of social fabric from which social action could emerge. This was a far more severe problem in east Germany than it was in Hungary, largely due to important differences in the organisation of production.

Second, the significant differences in the nature and the extent of the disintegration of the soviet system had important implications for the role that DFI

played in the two countries. Economic decentralisation in Hungary permitted enterprises to pursue development paths which were not tied to the plan nor to prescribed soviet social relations. As the planning system ceased to meet the needs of its constituent parts, enterprises increasingly looked beyond the plan to export to and import from western Europe. This undermined the integrity of the planned industry. By comparison, centralisation in East Germany had prevented the development of enterprise strategies, and the social fabric associated with them. As a result once the plan broke up there was less capacity to respond to change which resulted in more precipitous disruption than in Hungary.

Third, both countries pursued a neo-liberal path of transformation. In both countries this agenda disguised the weak state and legitimised the state's desertion of enterprises and the forced dependence on foreign capital and expertise. However, there were important differences between the paths of transformation in Hungary and east Germany which had significant implications for the restructuring of the auto industries. In Hungary the gradual break-up of the plan and the relatively negotiated reform programme that was introduced by the weak state, resulted in the creation of a marginalised group of automotive firms that teetered on the brink of collapse. In contrast the disintegration of the planned industry in east Germany was accompanied by the dismantling and closure of the industry by the strong (west) German state. The transformation of the industry there was highly statist. As a result in east Germany the industry was offered for sale to western investors. In Hungary there was greater continuity but even there auto enterprises were forced to seek foreign strategic partners.

As a result of these differences, whilst both countries relied on inward investment as the major tool of transforming their auto industries, the extent to which they did so differed. In Hungary the transformation of production relied, in part, on existing socio-economic resources whereas producers in east Germany were dismantled - disrupting scarce socio-economic resources - and forced to rely on the transplantation of alien foreign resources. This meant that change in Hungary was decentralised (see for example the case of IKARUS) whereas change in east Germany was highly centralised (see the case of SAZ). Thus the territorial-institutional fix in the two countries was quite different.

The legacy and the disintegration of the soviet system and the neo-liberal path of transformation meant that the institutionalisation of capitalism was limited and highly uneven. We will examine this in greater detail with reference to the four main claims made for foreign investment by the proponents of the neo-liberal 'transition to capitalism'; namely that inward investment would stimulate the marketisation of economic transactions, contribute to the privatisation of state owned enterprises, accelerate the reorientation of trade and industry towards the global economy, and stimulate the restructuring and modernisation of industrial capacity.

Firstly, the insulation and isolation of enterprises, and the foreign owned plants, limited the diffusion of market transactions. The path of transformation resulted in enterprises being cast adrift as forward and backward linkages were broken. As a result producers were paralysed; isolated from any mechanisms of co-ordination and

without the means (social fabric) from which strategic action could emerge. The disintegration of the soviet system and neo-liberal reforms disrupted not only formal networks (the plan) but also to varying extents informal networks (the shadow plan) especially in east Germany. This intensified the isolation and paralysis that enterprises were plunged into and made it difficult to transform the social relations of production. Thus although relations between enterprises were marketised, market forms of co-ordination were blocked. As a result there was a shift from a systemic failure to a market failure.

The isolation of enterprises was met with two contrasting strategies. The first strategy, dominant in Hungary, involved enterprises insulating themselves from the chaotic economy (which suffered from a regulatory deficit) whilst seeking investors. This was accompanied by the maintenance of entrenched social relations associated with the continuation of established behaviour, such as management-trade union coalitions. The way in which IKARUS sought to maintain its traditional links with customers in the former Soviet Union and the VASAS trade union was a good example of this strategy. The second strategy, dominant in east Germany, was the enforced break-up of enterprises by the state under the guise of privatisation to create the conditions under which capitalism could be imported and 'kick-started'. The break-up of the former Trabant producer, SAZ, and the denial of the possibility of *in situ* change was a good example of this form of development.

Secondly, the privatisation of state owned enterprises, regarded as a central process in creating a capitalist industry, proceeded slowly and was fraught with

problems. In Hungary it proved almost impossible to sell the most important and largest auto firms because of the economic crisis emanating from the lack of co-ordination in industry. As a result the majority of foreign automotive capital by-passed the indigenous sector. In east Germany the privatisation of the auto industry occurred more rapidly. However, a close examination of privatisation showed that the Treuhandanstalt sold bundles of 'empty' assets rather than enterprises. In this way the state prepared east Germany for a specific form of privatisation. In the light of this it would be misleading to argue that an *industry* was privatised and more accurate to argue that an industry was closed and its saleable *assets* forcibly prepared for exploitation by foreign investors.

Thirdly, the reorientation of trade and industry proceeded more successfully than privatisation, albeit with some ambivalent implications. The reliance of auto enterprises in Hungary on existing suppliers and customers fell but some key firms remained dependent on barter trade with former CMEA enterprises. Exports to western Europe increased (from a very low base) but in doing so Hungarian firms became locked-in to subservient positions in west European and Japanese supply chains. Moreover, the growth in exports was based on underutilising over capacity rather than on new processes and products. In contrast to Hungary's partial reorientation, in east Germany the reorientation of the auto industry was virtually total. Trade with former CMEA countries was halted and the industry became an 'extended workbench' of west German production systems.

Fourthly, the impact of direct foreign investment on the restructuring and modernisation of industrial capacity proved highly uneven. It was in part due to the difficulty of attempting to intensify production whilst output and demand declined precipitously. There were two particular problems. First, the complexity of change arising from the lack of co-ordination created a very uncertain economic and social environment which precluded strategic planning. The problems Magyar Suzuki faced when it sought to contract local state-owned suppliers was an indication of this problem. Second, enterprises lacked the means to institute change owing to the desertion of the state and poor access to investment capital. As a result the only means of intensifying production was to attempt to secure greater control over the labour process in order to increase labour efficiency. Deindustrialisation, unemployment and the weakness of labour and their representatives which accompanied transformation were all crucial in permitting greater management dominance over the workplace. In turn enterprises sought to compete in international markets not on the basis on their skilled workforces but on low labour costs. This had important implications for the way in which firms became integrated in the global economy.

Where foreign automotive investment played a highly significant role - albeit not one trumpeted by the neo-liberal exponents of transition - was in reshaping the balance of power between management and employees. In particular the attraction of foreign investors and the institution of 'normal' capitalist behaviour proved sufficient justification to curtail the strength of labour where it was influential and sustain its weakness where it was not. In short the territorial-institutional fix pursued in Hungary

and east Germany involved weak labour which was both a condition for and a consequence of foreign investment.

Overall the result of these developments was the highly uneven transformation of social relations. Some enterprises were able to intensify production whereas others were not. Moreover, often intensification only took place in islands within enterprises or single enterprises within production systems. This was because transformation in one factory or one production shop often depended on there not being a generalised transformation elsewhere. Change in east Germany exemplified this best: transformation, which according to the neo-liberal agenda meant privatisation, depended on the closure of the industry. The relationship between SAZ and VW's investment in east Germany illustrated this very well. The success of VW's project depended on forging new ways of producing automobiles which in turn depended on the conditions arising from the statist path of transformation which created or fostered a dependent, apathetic, weakened and alienated social fabric (the retraditionalisation of society) unlikely to internalise the capitalist *habitus*. Likewise the development of Suzuki and the stagnation of Ikarus in Hungary also indicated the ways in which the fates of different companies were intricately interwoven.

7.4 Step three: The spatial fix?

In the course of the 1990s the corporate and territorial fixes co-evolved to produce a new spatial configuration in east and central Europe as witnessed in Hungary and east Germany. Moreover the socio-economic transformation in the region was bound up with the development of capitalism beyond the region.

Principally, socio-economic transformation in ECE comprised a spatial fix which conjured-up the opportunity for western capital to expand and intensify Fordism.

At the macroeconomic scale the socio-economic transformation involved mustering political forces (both within and beyond the region) to adopt and sustain a particular vision of the development of capitalism and establishment of the mechanisms and institutions required to articulate and execute that vision in the countries concerned. This process constructed a macro-environment which was securely wedded to a version of capitalist development which depended on inter-territorial competition based on the adoption of exogenous resources ranging from foreign capital at one end of the spectrum to foreign accounting procedures and quality assurance systems at the other. The result was the opening-up of the region to the dynamics of global capitalism and its representatives in the form of direct foreign investors at the expense of the domestic producers.

At the micro scale the intensification of Fordism comprised a refashioning of the boundaries and balances between spatial and functional integration. Within individual plants there was a trend towards greater functional integration of work tasks. This typically involved job enlargement and a greater intensity of work accompanied by greater (apparent) commitment towards employees on the part of employers. Beyond individual plants there was a tendency towards increasing disintegration of the production process through greater outsourcing and the development of complex supply networks. However, greater outsourcing did not equate with regional integration. Indeed the emphasis placed by investors on their

employees and in some instances to place merely masked their limited commitment to the local area and an absence of regional integration.

Instead, foreign investments were locked-in to increasingly globalized production networks, the flexibility of which depended on global 'switching' decisions rather than localised 'adaptability'. The result was the generation of production systems based not on regional networks but on localised nodes or 'clans' (either within a single plant or across multiple plants of interconnected suppliers and customers) wedded to global networks. In this way the course of developments in ECE mirrored those elsewhere in Europe. The organisation of these production systems depended on a territorial order based on inter-regional competition which created the conditions which permitted corporations to consider switching functions from one place to another almost at will and went some way to suggest that even the larger investments did not necessarily represent long term commitments. Instead there was the prospect of firms withdrawing as rapidly and as easily as they had arrived.

The combination of the local adoption of exogenous resources and of adaptation and flexibility at the global scale through international switching decisions depended on a balance of neo-Fordist and negotiated forms of capitalism. Thus commitment to workforces took the form of relatively negotiated forms of social control. These were particularly connected to forms of economic democracy and the empowerment of workers associated with team working. However, these forms of negotiation were highly partial, more apparent than real, and depended on the absence of a negotiated form of capitalism beyond the factory gates. In this way capital used

locating in ECE as a way of intensifying Fordism, in other words creating neo-Fordism.

In doing so the spatial configuration that was produced comprised three elements: disembedded regional economies (especially evident in east Germany but which more generally replicated the geography of production which existed under central planning), intensified geographical inequality, and the prospect (at least) of intensified and accelerated geographical inconstancy. This in turn reflected the importance of place in shaping local paths of transformation. The varied legacies of the soviet system in different places were highly significant in shaping post-soviet transformations. These, and post-soviet changes were geographically mediated and highly spatially uneven. Uneven regional development was therefore simultaneously path dependent and path-shaping; specific forms of local development precluded the establishment of others. The most far reaching effect of this was that the options open to investors and territorial policy makers were increasingly inter-linked and correspondingly limited in scope.

7.5 Future research

Two sets of questions warranting further research emerge from this thesis. The first set revolve around the issues connected to the extent to which enterprises and foreign investors are successful in achieving their aims. In this respect two issues, above all demand future investigation. Owing to the significance of inter-firm relationships in shaping production systems and paths of regional development, the extent to which production is localised in the cases where such a development was a

stated intention requires further research. In particular it remains to be seen whether clusters of local suppliers emerge around assembly plants. The evidence presented in this thesis suggests that such a course of development is unlikely and that even if such a development were to take place the impact on the local economy is unlikely to be particularly marked. Also investigation into whether and if so, how, employees and their representative institutions develop and articulate their interests in the context of weak trade unions and in the face of employer attempts to intensify production and establish greater control over the workplace is due.

The second set of questions centres on the aspects of corporate strategy other than production and costs which form the focus of this thesis. A fuller consideration of the role of firms as social organisations which manage not only production, through the inter-firm relationships but also the wage relation through the labour process, and also contribute to the construction of markets, would contribute much to a broader appreciation of the intricacies of socio-economic transformation in east and central Europe. Not least the role that firms as organisations play, through the establishment of development goals and norms and modes of operation warrants deeper consideration. Additionally, the issue of the role of firms (and other institutions) in the construction of markets and patterns of trade and consumption a at variety of geographical scales demands further attention.

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